USE OF SCREENPRINT TO PRODUCE ORIGINAL ART WORKS BY MULTIPLYING ORIGINAL IMAGES

A THESIS
SUBMITTED TO THE DEPARTMENT OF
FINE ARTS
AND THE INSTITUTE OF FINE ARTS
OF BİLKENT UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
MASTER OF FINE ARTS

By

Zeliye Sarıkartal

September, 1995

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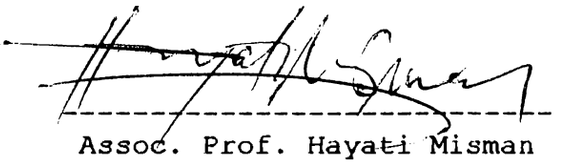

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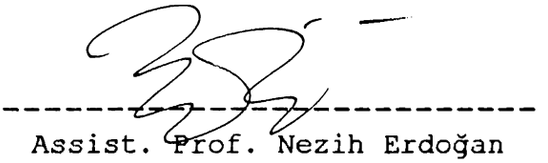

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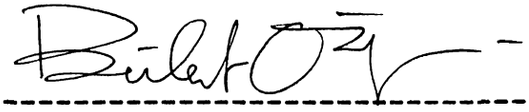

Prof. Dr. Bülent Özgüç, Director of the Institute of Fine Arts

ABSTRACT

USE OF SCREENPRINT TO PRODUCE ORIGINAL ART WORKS BY MULTIPLYING ORIGINAL IMAGES

Zekiye Sarıkartal

M.F.A. In Fine Arts

Supervisor: Assoc. Prof. Hayati Misman

September, 1995

Photography and screenprint constitute two important turning points throughout the history of printmaking. When photography freed printmaking from the task of producing analogues of reality, printmaking was sprung loose from its role subordinate to painting and sculpture. Printmaking has become a perfect medium to create images in which it is also shown that art and technology are combined in those images.

Screenprint represents the entrance of mass culture and commercial values in the realm of art, especially with the use of photographic imagery in silkscreening process.

In this study, after a historical survey of printmaking and photography, an account is given of the use of screenprint in art works from the 1950s up to the 1990s. Then, a detailed description is made of a work which is produced in the scope of this study in the light of the issues on photography and mechanical reproduction. Finally, an evaluation is made on contemporary printmaking as far as the issues on originality and visual communication are concerned.

Key words: printmaking, photography, screenprint, visual communication.

ÖZET

ÖZGÜN İMGELERİN ÇOĞALTIMIYLA ÜRETİLEN ÖZGÜN SANAT YAPITLARINDA İPEKBASKININ KULLANIMI

Zekiye Sarıkartal

Güzel Sanatlar Bölümü

Yüksek Lisans

Tez Yöneticisi: Doç. Hayati Misman

Eylül, 1995

Fotoğraf ve ipekbaskı, baskı tarihinde iki önemli dönüm noktasını oluştururlar. Fotoğraf, gerçekliğin taklitlerinin üretilmesi görevini baskı tekniklerinden devraldığında, baskı, resim ve heykele oranla ikincil konumundan kurtulmuştur. Böylece baskı, içinde sanat ve teknolojinin birleştirildiği imgelerin üretimi için yetkin bir ortam haline gelir.

İpekbaskı, özellikle baskı sürecinde fotoğraf görüntülerinin kullanımıyla, sanat alanına kitle kültürünün ve meta değerlerinin girişini temsil eder.

Bu çalışmada, baskı tekniklerinin ve fotoğrafın tarihi özetlendikten sonra, ipekbaskının 1950'lerden 1990'lara kadar sanat yapıtlarında kullanımı ele alınmıştır. Daha sonra, bu çalışmanın kapsamı içinde üretilen, fotoğraf ve mekanik yeniden üretim üzerine öne sürülen görüşlerin ışığında oluşan bir yerleştirme (enstalasyon), ayrıntılı bir biçimde betimlenmiştir. Son olarak, günümüz baskı sanatının, özgünlük ve görsel iletişim kavramları açısından bir değerlendirilmesi yapılmıştır.

Anahtar sözcükler: Baskı, fotoğraf, ipekbaskı, görsel iletişim.

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1. INTRODUCTION

The aim of this thesis is to find a significant line in the history of printmaking which has led to the use of multiplied images in a conceptual context. Original art works have been copied or multiplied throughout ages by printmaking processes. At a certain stage of its history, printmaking itself became a way of producing original art works even if this title of "original art work" was gained after long struggles. Taken from a technical point of view, photography, which was invented as a consequence of some technical developments in printmaking technology, was considered to have "perfect copies of reality in an automatic process". Printmaking had been the only technology used for this end until the advent of photography, the magic of modernism.

The first part of this study focuses on some turning points in the history of printmaking and photography. The main point of interest of the study is the relations between photography and screenprint as one of the latest techniques in printmaking technology. A chronological survey of artists who used photography and screenprint in their works is made with some examples of their works.

While studying on the history of prints and photography, one observes that, until the age of modernism, multiplied images have travelled a long way. Modernism has opened new doors to multiplication under the light of new beliefs, inventions and

technological applications. Photography is the most important one among them and it has brought new possibilities in various branches of science and art. Consequently, some important issues on photography are given; it is considered to be necessary to interpret some art works in the context of this study.

The application of printmaking techniques in art has gained a widespread usage in the second half of this century. Among them, screenprinting, being one of the latest of all the printmaking techniques, has also brought a new dimension into art such as commercialism. This brings a new understanding of our traditional conceptions of the original art work. Taking photography and screenprint in one hand, it can be seen that the multiplied works of art are also original works in their multiplied but unique forms.

Thus, surveying on the turning points of the history of printmaking and photography and reviewing the works produced with screenprint and photography together, some issues about the implications of photography and the mechanical reproduction in art have been given as well.

In the light of the above-mentioned survey, a work is produced using photo-silkscreen technique with an approach in which the issues on reproduction and photography are reconsidered. Besides, the way this work will be exhibited and its spatial effects in the place of exhibition are designed so as to create a conceptual relationship with the spectator. Some other works are also produced in relation with the main work which are inspired during the production process of the first one. They may be considered as a continuum of the first

work as well as separate works. The study will conclude with an interpretation of the mechanisms by which the visual message of the related work is produced in the context of the issues mentioned above.

2. A HISTORICAL SURVEY

2.1 A Summary of the Turning Points in the History of Printmaking and Photography

2.1.1 Printmaking

The term "print" denominates the idea of impressing a design or image, of transferring it from one surface to another. Printmaking is the taking of impressions on a soft material, from a design or pattern which is transferred on a plate or block. The transferability of the print, which makes it an object of substitution, is the prerequisite of its second basic quality; the possibility of duplication. This possibility of multiplication gives a print its peculiar status and prevents it from being confused with any other graphic arts. The print affords many possibilities of accumulation, repetition, and transposition. The print, thus, becomes an interchangeable work of art, one can be multiplied and distributed. The characteristics of this product -a transferred image, mass produced by a printing machine- is very different from those of the work of art with its transcendence of creation and immanence of meaning. The printmaker has to be both "creator" and "craftsman", meaning both "intellectual" and "manual" worker (Ivins, 1989).

By the rise of the middle class from 1830 on, painting aroused the interest of a wider public and printmaking became a thermometer of a painting's reputation. Painters found that they could make more money from the reproductions of a painting than from the painting itself. The print, thus, became a channel of transmission between two sectors conventionally described as "major art" and "minor art". The nineteenth century art teaching at schools was largely based on prints and casts. The print became "a means of diffusing models as well as a vehicle of a veritable codification of images, with a view to fixing a univocal language of art" (Melot et al., 1988).

In the course of this commercial development, functions that had been filled by one man got split apart in a specialization of labour. The painter painted, the draughtsman copied what the painter had painted in black and white for the engraver, the engraver rendered the drawings of the draughtsman. The shop owner's name was signed to the finished work. On the other hand, a series of technical developments had taken place related with the printmaking process which led, at the end, to the invention of photography.

At the end of the eighteenth century, Gilles-Louis Chiétien (1786) invented physionotrace with which it was possible to make quick and easy tracings of profiles and transfer them on copper in small size. Other devices which was used in this time was "camera obscura", and shortly afterwards, "camera lucida". They were used to make profiles of hills, valleys, and buildings successfuly for the making of prints (Newhall, 1982).

In the middle of the eighteenth century, in England, though the old methods of producing relief blocks on wood or soft metal had survived, in Bewick's shop in 1797, a new engraving tool was discovered to be used on a wooden block which made possible the production of lines that were customarily laid on copper. This discovery brought the wood-block back. During the same years Alloys Senefelder, in Bavaria, discovered a totally new process, which only needed a pencil provided only that the pigment came from it was greasy. Only five years after Senefelder, in 1802, Thomas Wegwood announced that he had been able to get an image of any object that was laid on a piece of paper treated with silver nitrate and exposed to the action of sun. But, unfortunately, after a little while, the image went dark. He could not find any way of making these images permanent. Later on, Davy discovered that silver chloride, instead of silver nitrate, reduced the time required to get the image which led to the discovery of the daguerreotype. Wegwood also tried to expose a sensitized paper to light in a camera obscura which led to the discovery of the photograph (Gernsheim, 1987).

At the end of the eighteenth century, Koenig introduced a printing machine operated by power instead of human muscle. Then, the most important developments of the first half of the nineteenth century took place in wood-engraving and in lithography. Wood-engraving was carried to its greatest virtuosity in England and lithography received its greatest development in France. When the Chinese packed their shipments of tea to England, excellent impressions were taken by using these little pieces of yellowish, very smooth and very thin paper. In 1817, ink rollers were put on the market to take the place of the ink balls that had been in use since the fifthteenth century.

The most important invention in printmaking prior to photography was electroplating (1836). By means of electrolysis, soft metals were made more durable by coating them with a microscobic layer of steel. Electroplating became a standard process and then, printmaking techniques multiplied such as "polytypages", "stereotypes", "tissierography", "paniconography" which reinforced the slopes of cuts in a printing surface, converting an intaglio engraving or a lithograph into a relief engraving and so, solving the problems created by mechanical printing. This was the beginning of an uncertainty for the print (Mellot et al., 1988).

About 1860, a minor wood engraver, Thomas Balton, had the idea of sensitizing the surface of his wood-block, on which he had a photograph printed from a negative. He made his engraving through the photograph as if from a drawing in tints on the block. Up to 1860, the original drawings had been replaced by photograph but the photographic model still had to be recopied on wood blocks or copper plates by the engraver. Photography was the outcome of this long period of experiment (Ivins, 1989).

The most important development in the nineteenth century was the discovery and exploitation of photography and the photographic process. It eliminated the draughtsman and the engraver from the making of repeatable pictorial statements and it developed such ways of repeating statements that were no longer confined to a single printing surface.

2.1.2 Photography

In the fifth century B.C., Mo-Ti, a Chinese man noticed that when the light reflected off an object, and that reflection passed through a pinhole onto a dark surface, an inverted image of the object was evident on the darker surface. In the tenth century, the Arabian Ibn Al-Haitham (Alhazen), repeated this visual experiment and he realized that by reducing the diameter of the pinhole, a fainter, reflected image resulted (Davenport, 1991).

The use of the camera obscura was realized early in the Renaissance as Alberti (1972), in his book *On Painting*, originally written in 1435, compared it to a window. It was developed to more useful forms throughout centuries. In the seventeenth and eighteenth centuries, a lens was fitted into one end, and the other end was covered with a sheet of glass. By the eighteenth century, camera obscuras became standard equipments for artists. It was the German philosopher Johann Heinrich Shulze who first observed and named the light-sensitive compound, phosphorous, in 1727. Another mechanical substitute for the artistic skill was the camera lucida, designed by William Hyde Wollaston in 1807:

> Drawing paper was laid flat. Over it a glass prism was suspended at eye level by a brass rod. Looking through a peephole centered over the edge of prism, the operator saw at the same time both the subject and the drawing paper; his pencil was quided by the virtual image. (Newhall, 1982: 11)

The difference of the camera lucida from camera obscura is that it could easily be carried about. By the use of this physical aid, anybody could do an exact copying of nature.

Niépce, while trying to fix the colors on a paper sensitized with silver chloride, noted that the background of the picture was black, and the objects white, that was lighter than the background. He, then, searched for a substance that would bleach instead of darkening in light. Then, he found that, bitumen, a certain form of asphalt used by etchers, was light sensitive. Niépce's discovery was, in fact, the photogravure process and also the negatives which he could not obtain the positives. He met Louis Jacques Mandé Daguerre in 1827, who was working as a successful painter in Paris and performing exhibitions in the respected Paris saloon. In 1820, Daguerre decided to enlarge his paintings by means of his new invention, the Diorama. Essentially, the Diaroma was a cross between painting and public entertainment. Wall-sized scenes were painted on gauze to create illusory effects made through the use of a camera obscura, and the principles of light were used to form its effect (Davenport, 1991).

Henry Fox Talbot in England, too, invented a technique in 1833, identical to Daguerre's, without knowing his invention. In 1835, Talbot found the way to make positive images from the negative. On January 31, 1836, Talbot's paper "Some Account of the Art of Photogenic Drawing, or the Process by which Natural Objects may be Made to Delineate Themselves without the Aid of the Artist's Pencil", was read at the Royal Society to mark the discovery of photography (Newhall, 1982: 20). On the other hand, on August 19, 1839, the Chamber of Deputies of the French Government reported the exact technical details of the daguerreotype process.

Despite its popularity, the daguerreotype did not lend itself to ready duplication as it was fragile and had to be kept under glass or framed. It was Talbot again who invented calotype negatives in 1841, which led to voluminous production. The technical improvements made by Frenchmen on Talbot's invention of calotype gave the possibility of printing in thousands. In 1851, Frederick Scott Archer invented a method of sensitizing glass plates with silver salts by the use of collodion instead of paper which was widespread until 1880. With the invention of collodion plate, other technical innovations came in lens design and printmaking process (Ivins,1989).

2.1.3 Review of the Relations of Photography with Printmaking Processes

The enermous industry brought into existence by photography, left the print in a small niche of its own. These two sectors represented two rival economic systems. For the printmaker, photography was useful at first, as providing a repertory of images taken from nature and real life. Then, it was taken up as a technical device facilitating transfers and offering a useful substitute for tracing paper and the camera lucida, chiefly in lithography and in screenprint.

The first popular use for daguerreotypes was in portraiture; but the resulting image was stiff and unflattering. The subject looked lifeless and catatonic. Artists toned the areas of the plates with small amount of pale color around lips and cheeks to make the subject appear more lifelike. The painters insisted that the

daguerreotype could not be art, as it was made with a machine and it did not have the ability to reproduce colors. The painting establishment regarded the daguerreotype as simply a process of all chemistry with no sensitivity (Davenport, 1991).

In 1859, the French poet and art critic Charles Baudelaire summed up the feeling of the majority of the painting community by issuing a manifesto entitled *The Mirror of Art*. In his article, he proclaimed that "the photographic industry was the refuge of the every would-be painter," that "the ill-applied developments of photography...have contributed much to the impoverishment of the French artistic genius," and ended his proclamation with a call for photography to "return to its true duty, which is to be the servant of the sciences and arts -but the humble servant" (Baudelaire,1955: 228-231).

The daguerreotype and calotype did not threaten engravers as they are not suitable for printing purposes; but what Niépce had worked out was the photogravure process which marked the end of manual engraving. The years between 1840 and 1860 was the period which gave way to the final transformation of the print into art form under the impact of the printed photograph. Up to 1860, the photographic model had to be recopied on the wood blocks or copper plates by the manual engraver; only the original drawing had to be replaced by the photograph. In 1843, the first daguerreotype was converted into an engraved plate "by purely chemical means and with no artist's retouching" for the album *Excursions Daguerriens* (Mellot et al., 1988: 106).

2.1.4. Claims of Originality

In 1834, Alexandre Decamps, in his small publication *Le Musée*, asked artists to provide a reproduction of their works themselves. This raised the problem of "original" reproductions. Thus, "authentic" reproductions of artists' sketches were published systematically in *L'Autographie au Salon* from 1863 to 1865 and in *Le Salon, dessin autographe des artistes* in 1868. The magazines invented artists to recopy their own works for reproduction. Publishers embarked on encyclopaedic works of reproduction. With publications of this nature in full spate, manual engraving was replaced by mechanical processes:

> But at the same time a new trend began to assert itself: the need for originality in the print, which always had the effect of emphasizing the close tie with the artist, while glossing over the gap between the reproduction and the original (Mellot et al., 1988: 109).

Conscientious craftsmen, as industrialization gained ground, either lost their jobs or emerged as original artists. Other artists, not normally tempted by printmaking were drawn by the opportunity for the painter-etcher to reproduce their own pictures at low costs. Constable, in the 1820s and 1830s, paid Lucas to make after rough sketches which he furnished for the purpose. Constable corrected the proofs of the many states, and in so doing, introduced so many changes "...that it is fair to say that the impressions should be called original prints and not reproductive prints" (Ivins, 1989: 85).

Delacroix and Doré were two of the small handful of painters who actively appreciated the role of photography in its relation to art.

In 1854, Delacroix wrote to a friend that "it (photography) is the tangible demonstration of drawing from nature, of which we have had more than quite imperfect ideas" (Escholier, 1929: 201).

In May 1863, Alfred Sensier concieved the idea of founding a print society of patrons and business partners, the "Societé des Dix" and the critic Philippe Burty put forward the idea that the number of prints should be limited and the original plate destroyed.

Whistler and Degas were the first artists who saw that printmaking had a future of its own, independent of reproductive engraving. From about 1856, they threw of the constraints imposed by a uniform print run. They varied the paper used, the inking, and the heightening as a result of treating each print as an individual work and turned the whole technique of printmaking into a sophisticated manner of drawing. Each impression was unique and in this sense, Degas spoke of "original" prints:

> States were multiplied to as many as twenty, ink was used like paint, and pastel added to the ink. Variations and improvisations were indulged in, each signed individually (since each was unique) and sometimes numbered (since they formed sets) (Mellots et al., 1988: 110).

Collaborations between painters, printmakers and photographers thrived in the mid 1800s. In 1864, Matthew Brady's studio took the photograph of Abraham Lincoln that was ultimately etched on the American 5 dollar bill. The Barbizon school developed the "cliché-verre" process, which consisted of painters scratching designs into a coated photographic plate, then printing the resulting image. Edgar Degas and Toulouse Lautrec used photographs extensively as studies for later paintings. Some artists such as Lautrec, Delacroix

and Hill hired photographers specifically for certain projects. Others, such as Degas and Eakins, relied on existing photographs for reference (Davenport, 1991).

This idea of producing unique works of art, or differential works limited in number from printmaking techniques gained ground in 1860s, indicating that these were individual works of art, not objects of mass production. By 1900, the print market had won an established place in the art world. A new attitude of artists towards the print appeared. Printmaking allowed the artists to control the production and diffusion of their works. Seymour Haden founded the Socity of Painter-Echers in 1880, seeking acceptance of printmaker artists on equal basis with painters and sculpters. In 1911, Bye-Laws established a new Society to promote engraving in all its forms for furthering the interests of artists. It was Sir William Russell Flint who signed the reproductions of his etchings first in 1931. The difference between an original print and a reproduction was out of question then, and signing the reproductions just like originals had begun. Today, it is difficult to define an original print as a result of technological developments in the printing processes. Artists wish to take the advantage of new advances of technology. Yet, the Third International Congress of Plastic Arts (1960) in Vienna, the French National Committee on Engraving (1965), and the Print Council of America (1967) had stated that, the artists must make the print matrix alone. The members of the mentioned societies generally considered an original print as an image conceived by the artist as a print, pulled in a numbered edition, and signed by the artist. Each print was regarded as a multioriginal, printed from the matrix created for that purpose, and

all the stages are strictly controlled by the artist (Winkelman, 1990-91: 6).

2.2. Screenprint

Screenprint is among the newest of graphic arts and has the shortest history as a fine art medium. The origins of the technique is quite obscure but it is clear that it came throughout the centuries by the ancient stencil methods practised in many parts of the world. The Chinese and Japanese developed the process as they found it suitable for transferring images to fabric as a means of decoration and making embroidery patterns. Stenciled duplicate images have been found in the Caves of the Thousand Buddhas in western China (Mellot et al., 1988: 24).

The technique reached the West in the late thirteenth and early fourteenth centuries, through the journeys of Marco Polo. The Japanese created several innovations; they cut complex images from double sheets of thin, waterproof papers. Between the double sheets, they glued threads of silk or human hair to hold free standing stencil forms and linear areas together. This meshlike weave may have suggested the use of silk fabric as a printing vehicle.

Europeans used stencilling to color playing cards and religious pictures printed from woodblocks. By 1850s, it was discovered that Japanese had perfected a method of using fine silk threads and strands of human hair to hold the floating shapes. Gradually, the technique began to be used on furniture, fabrics, and wallpaper. Silk as a stencil carrier probably was used in France in about 1870

for the printing of textiles. Stencilled wallpaper had a great popularity under the influence of its inventor, Jean Papillon. It was recorded in England, the use of a silk stencil in a patent awarded to Samuel Simson in 1907, but he did not use a squeegee to distribute the color instead of the known bristle brush. By the 1920s, the first automatic screenprinting machine had been invented and it allowed textile manufacturers to use free designs and brighter colors penetrating more deeply into the fabric.

The applications of the silkscreen technique were largely commercial in the early twentieth century. It was proved to be a perfect medium for the bold designs and colors of the newly developing advertisement industry. As time went on, new developments showed that silkscreen methods could be employed for printed circuitry of all kinds.

In the United States, screenprint developed within the commercial industry. In 1914, a commercial artist, John Pilsworth, perfected a multicolor screen process called the Selectasine method, which led to wide use of screenprint in the growing advertising industry. By 1920s, automated screen printing machines invented and in 1929, a screen printer, Louis D'Autremont, developed a knife cut stencil film patented under the name Pro-Film. Nu-Film was developed by Joseph Ulano, which was simpler to cut and easier to adhere to the screen. Parallel to these developments, faster drying inks for the automated printing machines were also put in the market. Although photographic process were used for textiles and wallpaper in England in the late nineteenth century, they were slow to develop (Mara, 1979).

2.2.1. Technique of Screenprinting

Screenprinting is a variety of stencilling. On a rectangular wooden frame, a gauze screen is fixed. Open and closed areas are created on the screen by the help of various ways and the frame is laid directly on a sheet of paper. Printing ink is spread over the mesh and forced through it with a squeegee (a rubber blade) which helps to transfer the ink onto the paper. The material of the screen is usually silk, cotton, nylon, or a metal mesh.

The earliest technique in applying the design was to cut out a masking stencil of paper and to attach it under the screen. Another technique is to cover the unwanted areas with a liquid which can set and block the holes in the mesh. Different effects can be produced by trying different liquids. With the developments in the use of photostencils, photographic images can be transferred into the print. The screen is coated with bichromated gelatine and placed with a photographic negative or diapositive. When it is posed under light for some minutes, the black areas of the transparency remains soft whereas the unwanted areas are hardened. When the screen is washed with warm water, the soft areas are gone and the hard areas can act as a stencil. This process should be remade for each color since a screen cannot be easily inked in more than one color.

Compared with other printing processes, screenprinting deposits a much thicker charge of ink onto the paper and this produces a richer impasto and a vivid range of color.

2.2.2 The Rise of Serigraph

It was only during the 1930s that a few artists and printmakers began to see the potential of serigraphy for personal expression. During the economic depression in 1930s, Antony Velonis and a group of artists received a permission to establish a unit in screenprinting from the Work Progress Administration which was established by President Franklin Roosevelt to alleviate the widespread unemployment created by the Great Depression. Thus, artists received federal subsidies to continue to make art. These artists expanded the creative aspects of the screenprint which were unknown to commercial painters, largely because of the cheapness and ease of the process.

However, exhibition opportunities were limited, due to the earlier screenprint commercial association. Velonis thought that, a new name might link the prints to the fine arts. He coined a new word *serigraph* which joins the Latin word *seri*, meaning "silk" and the Greek word *graphos*, meaning "to draw or write". Carl Zigrosser was the first gallery director who organized the first all-serigraph exhibition in April 1940 (Mara, 1979).

In 1940, the National Serigraph Society was founded. Many artists such as Guy Maccoy, Robert Gwathmey, Harry Sternberg, Harry Gotlieb, Elizabeth Olds, Ben Shahn, Mervin Jules, Ruth Gikow, Edward Landon, and Hyman Worsager were intrigued by the medium. The best known prints of these years were by Ben Shahn and Jackson Pollock. The National Serigraph Society wholeheartedly supported the restrictive notion of "the original print". The artists were totally responsible

for all the work, and they were not permitted to utilize any form of photographic process. Besides, they were personally responsible for the printing and limiting of their editions.

Ben Shahn was the first artist who used silkscreen as a result of his combination of a calligraphic style with a flat painting technique; silkscreen technique was then developed as a commercial medium into the realm of art. In the early 1940s, many contemporary artists reproduced their paintings in silkscreen as this technique had many advantages. For example, many colors could be perfectly transferred onto paper with the registration of several methods of creating the image on the screen (Castleman, 1988).

However, in the 1950s, with the rise of Abstract Expressionism, there seemed to be a general decline for the interest in the serigraph among artists. The fundamental idea of Abstract Expressionism, to locate the content of a work of art in its purely visual aspects, brought an emphasis on the individual style, especially in handling the medium. Throughout the late 1950s, artists such as Jackson Pollock, Willem de Kooning, Franz Kline, Clyford Still, Mark Rothko, and Barnett Newman had been giving an aesthetic lead to American art by exploring the psychological, expressive, and coloristic elements of painterly process in ways that fulfilled the implications of surrealism, expressionism or color abstraction. This group of artists, principally based in New York, constituted a group of 'Abstract Expessionists' (Hughes, 1984).

By 1962, the National Serigraph Society ceased to exist. In the mid 1960s, Tatyana Grosman invited many artists to her house outside New York City to make prints, especially litographs, for ULAE (Universal Limited Art Editions). Among them, Johns, Rauschenberg and Jim Dine tried their first printmakings. Neo-Dada gestures of Jasper Johns and Robert Rauschenberg looked subversively on the familiar imagery of contemporary mass-culture. Such private studios trained master printers, by providing the resources and services essential to artist-printmakers. The tradition in the United States was built up by offering the artists the technical and collaborative resources of the printmaking workshops. In Europe, print editions were proliferated by such artists as Pablo Picasso, Marc Chagall, and Joan Miro (Armstrong and McGuire, 1989).

In 1960s, there was a reaction against the success of Abstract Expressionism. To avoid its personalized gestures, artists introduced figurative subject-matters, and a new way of process in which the medium imposes its discipline on the subject. The lithograph and screenprint were significant as preferable mediums and thus, printmaking gained an important status in the more general history of art, which it had rarely gained before.

The most important stage in this change of attitude was the establishment of the Kelpra Studio by Christopher Prater in London. His project of screenprints from many of the leading British artists to be commissioned by the Institute of Contemporary Arts in 1962 was successful. Among these artists, Eduardo Paolozzi, Richard Hamilton, and R. B. Kitaj were mentioned. A parallel development in America, revitalized the screenprint process among the leading Pop artists

such as Andy Warhol, Roy Lichenstein, and Robert Rauschenberg. They have extended the usage of this process by using screenprint on the canvas as the basis for many paintings.

3. USE OF SILKSCREENING IN ART WORKS

Prints have two fundemental roles in the post-medieval culture. The first is the scientific organization of the knowledge of nature and the second is the examination of a shared visual experience. However, photographic and electronic ways of transmission have led to new techniques of producing images (Ivins, 1969). Thus the print became a useful tool to examine the contemporary conventions. The explosion in printmaking during the 1960s can be related to this new role. The qualities of printmaking -of each medium, litographs, screenprints, copperplates, and woodcuts- have gained a sensitivity both among the artists and the viewer (Field and Fine, 1987). Printmakers of the 1960s, with their focus on mass communication, provided a new platform for the prints on contemporary popular imagery. Among other techniques, two important aspects of the screenprinting process have appealed to the artists. First of all, it can print flat, unmodulated, and sharply defined areas of color; and second, it can incorporate photographic imagery. Especially, this incorporation ideally suited to the Pop artists' occupation with the psychological and aesthetic aspects of standard commercialism and political imagery. Screenprint itself, was a commercial medium and by using this technique, the Pop artists captured the rawness of effect of the original imagery and at the same time, they manipulated the viewer's response by putting it into a fine art context.

Adopting itself to the modern world, the print has become a work of art which changes hand from buyer to seller and which lends itself to industrial production. Now with the habits and expectations of people relating to reproduction and replication of everything, printmaking is at the core of the mass media which dominates the human feeling and behaviour.

When artists put the commercial imagery and photography directly into their art in 1960s, they questioned the enterprise of photographic and reproduced imagery. The photomechanical process of reproduction encouraged direct quotations from diverse sources.

3.1. America

3.1.1. The Fifties: Robert Rauschenberg and Jasper Johns

Robert Rauschenberg and Jasper Johns were the first artists in the United States who used printmaking techniques in their art works. Rauschenberg combined hand-drawn imagery with photography by incorporating the impressions of commonplace objects into his prints in the same way as he included sculpture into his paintings. He used screenprint onto lithography stone to print hard edges and bright, unmodulated colors (Armstrong and McGuire, 1989).

After a visit to Andy Warhol's studio in 1962, Rauschenberg began to employ silkscreen in his paintings as a replacement of the three-dimentional objects he had been using. The appearance of this technique marked a significant change in his works. By duplicating

the same images, he tries to force the viewer to understand the meaninglessness of them (Castleman, 1988).

When Jasper Johns painted his *Flags*, he was just 25 and he started a new discussion in art, in line with Rauschenberg. They together underlined that they liked to use ordinary motifs and techniques, as a contrary question to daily life. Jasper Johns explains his ideas and his feelings in an interview by Katrina Martin (1980: 59-60) as follows:

> ...Just the process of printmaking allows you to do -not *allows* you to do things but makes your mind work in a different way than, say, painting with a brush does. It changes your idea of economy and what is -what becomes of- a unit. In some forms of printmaking, for instance, it is very easy to reverse an image and suddenly have exactly what you have been working with facing the other direction and allowing you to work with that. Whereas if you were doing a painting, you would only do that out of perversity -you would have to have a serious interest to go to the trouble to do that. But in printmaking, things like that become easy, and you may want to just play with that and see what it amounts to. Whereas if you had to do it in a more laborious way, you wouldn't want to give it that energy. Your curiousity wouldn't be that strong. There's a lot of that in printmaking. And some of that feeds back into painting, because then you see, you find things which are necessary to printmaking that become interesting in themselves and can be used in painting where they're not necessary but become like ideas. And in that way printmaking has affected my painting a lot.... Instead of smearing and slurring, you're to make it in steps (in printmaking). And then, of course, the other interest goes into printmaking. It becomes very playful, because then you would like to try in printmaking something that isn't in its nature. That's that quality with the screenprinting that I think I tend to do, which I don't think is particularly appropriate".

Johns adopted the silkscreen into his works not for its photographic or machine made qualities, but for its painterly potentials. He made rich, almost painting-like prints which trace the earlier ideas,

complementary colors, and schematic drawings under the layers of screened colors (Castleman, 1988).

3.1.2. The Sixties: Andy Warhol

Silkscreen has become the dominant medium of Pop art by Andy Warhol. He chose the silkscreen as the medium for his images which he created both on paper and on canvas. He combined flat, solid-colored shapes with enlarged reproductions of photographs imposed on the screen photographically (Castleman, 1988).

Andy Warhol simply celebrated pop-culture through pioneering a variety of techniques, but principally the visual isolation of imagery, its repetition and similarity to printed images and the use of garish color denote the visual garishness that is often encountered in mass culture. The American culture as a whole, was in a strong dynamism, marked by the middle class values. His background gave him an angle on the national culture which is quite ordinary, and from the dominant middle-class viewpoint -shared by all other Pop artists (Hughes, 1984).

Johns' and Rauschenberg's show in 1958, gave Warhol a desire to break with 'commercial' art, and in the early 1960s, he began painting mass-culture objects such as coca-cola bottles, food cans, refrigrators, and television sets. In 1962, Warhol and Rauschenberg started to use photography in printmaking and in painting with commercial, modern, and urban images. Screenprinting became the medium of middle sixties (Mellot, et. al., 1988).

Andy Warhol had started his disaster paintings when he saw the headline of *Daily News* on June 4, 1962, "129 Die in Jet", thinking that it was enough affirmation of life with soup cans and coke bottles. This new idea also brought in using of photo-silkscreen printing technique. He could now incorporate mechanical repetition directly into his work. Thus he achieved the 'quantity and repetition' that he saw essential to his art and 'assembly line effect' (Armstrong and Mc Guire, 1989:40).

He started his *Marilyn* series on the very day the actress committed suicide (4 August 1962). He obviously heightened the garishness of Marilyn's make-up so as to refer to the way through which Marilyn Monroe had been presented to world. He used silkscreen technique to create further sets of images of the soup cans, coke bottles, coffee-cans and dollar bills as well as new sets of images of movie and pop stars such as Elizabeth Taylor, Marlon Brando, and Elvis Presley. By exhibiting Leonardo da Vinci's *Mona Lisa* in the Metropolitan Museum of Art in New York in February 1963, he questioned not only the cultural status of Leonardo but equally stressed the vast mass-media dissemination of the original image. In the same year, he went on creating images of long series of deaths, disasters, suicides, car crashes, ganster funerals, electric chairs, fatalities caused by food poisoning, atomic explosions.

As well as addressing our indifference to the deaths of people unknown to us, in almost all of Warhol's death and disaster paintings, the visual repetition of some elements points to the way we habitually encounter tragic or horrific imagery through the mass media; he throws back the morbidity or vicariousness of our interest

in disaster. The use of color also importantly contributes to the associations of such imagery. The fact that Warhol coupled many of the paintings with a complementary canvas painted blankly with the same backgroung color also supports those associations. The blankness of each complementary image projects the meaninglessness of the accidental or man-made tragedies that are represented alongside (Kynastone McShine ed., 1989).

In 1971-1972, he created over 2.000 paintings of the Chinese communist leader, *Chairman Mao*, which was a great irony of idolizing the images of him. In 1976, he painted and printed his *Hammer and Sickle* and *Skulls* series. Compared to *Chairman Mao* series, *Hammer and Sickle* add little irony to political and cultural affairs (Wrenn, 1991; Shanes, 1991).

Warhol found a stylistic solution by printing photographic images as he was seeking non-personal ways for making art. The cow wallpapers which he printed in 1966 and then continued in different colors till the 1970s and his *Marilyn* series are suites, each element of which has meaning only in relation to the others and amidst the others. The artist exploits the possibility of collection and thus, this possibility of "collection" already has a semantic value (Mellot, et. al., 1988).

In the industrialized societies, photography, as a way of producing and consuming images, has become an agent of culture and ideology. In the art of the sixties, photography began to be widespreadly used. Warhol's use of photography is an identifacation of this mass medium with multiple reproduction. His insistent use of popular

imagery, his production of series and multiples, the name of his studio (The Factory), and his presenting himself as an 'impresario' is a break with modern values. As having nothing to do with significance or revelation, Warhol's art can be related to Duchamp's readymades. Together with Rauschenberg, Ruscha, and Johns, his representing photographic images from mass culture can be asociated with the postmodernist concept of pastige. Again, entrance of photograph (already represented) as a work of art means to break the boundaries of the field of art as a separate sphere of existence (Hughes, 1984).

3.1.3. The Seventies

3.1.3.1. Richard Estes

Richard Estes is one of the artists who has analyzed and revealed the possibilities of photographic process in screenprint. His *Urban Landscapes I* was a synthesis of photographic Realism and commercial screenprint. His photorealistic imagery has just suited the silkscreen medium. He played a key role in elevating the popularity of the medium in the 1970s. *Urban Landscapes I* (1972) is a portfolio of eight multi-colored screenprints, in which he used colors between 50 and 114 on each impression (Armstrong and McGuire, 1989).

3.1.3.2. Jennifer Bartlett

The conceptualization of Realism in the 1970s brought the focus on the feelings about the objective world and the development of a personal language of represantation. Jennifer Bartlett is among the

artists who concentrates on the means of representation as a resolution of the conflict between the natural world and Modernism (Field, 1987).

She has used steel plates in square form, coated with white enamel; she then silkscreened a grid on them and painted dots inside this grid. When she installed all the plates together, there occured a big painting. In her early works, the dots were referring to mathematical system. In her *Graceland Mansions,* she used the same rudimentary house paintings which were in fact the portraits of people who are her friends or whom she adored. The titles of these paintings are the adresses of those people. *Graceland Mansions* is in fact five paintings hung in a horizontal sequence showing the same symbolic house image from five different angles, at five different times of day. Her most famous print is derived from this painting. She used five different techniques of printmaking: drypoint, aquatint, silkscreen, woodcut, and lithography.

Rhapsody and *At Sea, Japan* can be mentioned among her commissions. Her white enamelled and gray gridded plates provide an infinitely adjustable and durable surface which holds the wall like a second skin. This is a multimedia concept of painting. *Rhapsody* (1975-76) was exhibited at the Paula Cooper Gallery. It is a multiple work of 988 plates which fills the entire gallery. She chose four natural elements -mountain, tree, ocean, house- which meet the elements of design such as line, shape, and color. These major themes are reiterated in the endless variations and combinations, in different styles: dotting or freehand brushstrokes in small, medium and large sizes.

At Sea, Japan was installed along a continuous wall and became a permanent, commissionlike installation, consisting of 500 plates and 12 canvases; it was purchased by the Keio University, Tokyo (Goldwater, Smith and Tomkins, 1985).

3.1.3.3. Robert Indiana

Printmaking media have also served for the Minimalist and Conceptual tendencies during the seventies. Especially, literal illustrations maintain that the Conceptual art movement outgrew in the use of verbal languages (Field,1987). A typical example of such works is Robert Indiana's *Love*. The letters of the word is arranged in a squire form in bright colors, and this work became the image for 'hippie' generation as a universal spiritual sign. As Pop art intensifies on the proliferation of images, uniqueness became a suspect quality in modern times:

> ...the symbol Indiana devised along the lines of a business logotype became a limited edition print (several times in various colors), was pirated for commercial production as posters, was made into a mammoth steel sculpture, and finally, was engraved and issued as an official United States postage stamp in 1973... (Castleman, 1988, p. 182-183).

3.1.3.4. Bruce Nauman

Bruce Nauman can be considered among the artists using screenprinting technique in a conceptual manner. In his word prints implying the reverse meaning as in *WAR-RAW*, we can feel, for example, the reverse technique of lithography at the same time with the reverse meaning of the word "WAR" as well as how "war" produces

"RAW" just like the artist produces his prints; or like in *Perfect Odor*, the viewer is forced to smell the perfect scent but he can only smell the scent of the ink (Cordes, 1989). His work, *Studies for Holograms* is a suite of five screenprints drew from a body of material he had explored in the late 1960s. This work has an affinity with the Viennese artist Franz Xaver Messerschmidt's *Self Portraits Grimacing* (1776-1783), in which Messerschmidt portrayed himself with tensed muscles and tightly closed mouth, as if his head was under pressure. In *Studies for Holograms*, Nauman squeezed and pulled at his lips -he is making faces. By screenprinting such photographs of himself, he is transforming private acts into confrontational images (Armstrong and McGuire, 1989).

3.2. Europe

In Great Britain, silkscreen has also dominated printmaking during the sixties. The British artist Richard Hamilton is among the artists who clearly set forth the objectives of Pop art. In his screenprint *Interior* (1964), he used the commercially developed methods of photography; he combined clippings from magazines to create his own imagery. In *The Solomon R. Guggenheim* (1965), he also used a picture postcard of the Guggenheim Museum, in this direction (Castleman, 1988).

Eduardo Paolozzi and R. B. Kitaj have composed their silkscreens in a serial manner as their colleaques in the U. S. Their creations have referred to 'artified' visual informations. Paolozzi's major suite of prints *As Is When* (1965) reflects the life and philosophy of Wittgenstein who interpreted languages as the pictures of world

(Field, 1987). There are machines and dehumanized human objects with a large amount of geometric forms referring to sources in scientific illustration. This presents the viewer with 'artified' visual information, as in Rauschenberg's prints to be recovered and turned into art itself (Castleman, 1988).

Kitaj has started to make screenprint in 1963 as a way of recycling ready-made images by means of photomechanical reproduction. Kitaj utilized a geometric structure to codify his forms and he inserted quotations and names, to encourage the viewer in connecting the visual material. His *World Ruin Through Black Magic* (1963) and *In Our Times* (1969), screenprints of transformed photoimages, are in a manner of serial that the viewer is activated by 'artificial' visual information once again (Castleman, 1988).

3.3. Multiples[1]

Although the term 'multiple' is now understood to refer to a small sculpture produced in relatively large editions, it is also related to the print in many ways. John Loring has stated that:

> Multiplicity certainly affects material value. But once and for all it should be pointed out that if the response to a work of art is to considerations of number, cost, production techniques, or social implications, then that response is purely material or moral and has no bearing on or relationship whatsoever to aesthetic experience and can in no way augment or diminish aesthetic return (cited in Solway et al, 1991: 7).

[1]Prints that are made without limiting the available numbers are called multiples (*Printmaking Today*, 4, Autumn, 1991: 4).

It is a way to devalue the original but the very idea of the multiple is original enough. The ready-made can be accepted as the forerunner to the idea of the multiple. It was Duchamp first who had the desire to multiple his originals. He wanted to abolish the idea of original in art; he stated: "I want something where the eye and the hand count for nothing" (cited in Solway et al, 1991: 8). Although nearly all the Pop artists made prints during the sixties, there aroused an interest towards using found objects from old fashioned ones to contemporary trash. In France, the New Realist artists, Yves Klein, Jean Tinguely, Niki de Saint-Phalle, Arman, and Christo created prints during the sixties. Arman accumulated similar or identical objects to have a formal emphasis of the American Pop artists. Tinguely made prints of "self-destructing machines" by recording diabolical plans in the various media. Saint-Phalle used superficially derived folk art motifs which might be considered as a manifestation of the rising female consciousness. Christo printed his wrapped objects, landscapes, and buildings. Arman, Tinguelly, and Saint-Phalle had contributed works to the the first 'multiple' art project, MAT (Multiplication of Transformable Art) organized by the Swiss artist Karl Gerstner and Daniel Spoerri in 1959. This was the first exhibition of the group of three-dimensional objects in editions (Castleman, 1988).

Multiples were produced by publishers and presented in portfolios taking their cues from artists. The multiple may or may not be considered an important work of art by collectors' standards. But, if the artist who wanted to produce multiples had connected the specific object and the idea, they were important enough to produce in an edition. Artists, such as Jim Dine, Tom Wasselmann, Andy

Warhol, Allan d'Arcangelo, and Claes Oldenburg had produced multiples in common portfolios (*4 on Plexiglas, 7 Objects in a Box*) following the example of Duchamp's *La Boite en Valise* (1941). The artists produced and published many portfolios consisting of a variety of objects and printed matter. Especially Fluxus[2] members have produced lots of multiples with the idea that their objects should become active players in the culture at large (Solway and et al., 1991).

3.3.1. Claes Oldenburg

Oldenburg is one of the artists pioneering the early creation of the multiple form, following the tradition of Marcel Duchamp's readymade. Oldenburg moved beyond this traditon by transforming and recontextualizing his objects. He opened "The Store" in New York City, in 1961, with the populist idea of making art for ordinary people, accessible in an ordinary way, where handmade replicas of mass-produced objects are sold. He produced his first multiples *California Ray Guns*, in vacuum formed plastic of various colors in 1964.

[2]Fluxus movement has a special place among such movements as Futurism, Dada, and Constructivism which marked the dissolution of the conventional art forms with its aims at democratizing the process, changing the meaning of art by devaluating the status of art work as commodity with the notion of humour. George Maciunas, the designer, the publisher, and the editor in-chief of the magazine *Fluxus 1* which appeared as an anthology of printed art in 1964. However, it became more radical in variety of formats with small objects in envelopes fastened together with three large bolts and the magazine was mailed in a wooden box branded or stenciled with the title. Maciunas emphasized that the origins of the concrete art were readymade objects and fluxus was against the art object as a commodity. All people must be involved in living art, anti-art, non-reality art. Anything can be substituted for art, and anyone can do it. It gave way to Conceptual art, Performance art, Political art, Mail art, Minimalism, art books, New music and mass produced art (Armstrong and Rothfuss eds., 1993).

The *Tea Bag* multiple represents the subject after use, in its original form as a dropped tea bag. It was made for the portfolio *4 on Plexiglas* shared by Larry Rivers, Barnett Newman, and Philip Guston. The print is a relief as a version of a sculptor's approach to make a print. He used vinly, serigraphed plexiglas and felt, and ryon cord. His *Nose* was proposed as a shape for tunnel entrances along the freeways and the subject was also used on a silk handkerchief screenprinted as a souvenir for Documenta 1968.

3.3.2. Edward Kienholz

His multiple work *Sawdy* reflects the trend at the beginning of the 1970s, which is, artists' multiples being produced by print workshops. Gemini G. E. L. collaborated Kienholz to fabricate fifty-five pieces, each one made of a car door, a mirrored window, a screenprint, a fluorescent light, and galvanized sheet metal with applied automotive lacquer paint and polyester resin. The result is a multiple sculpture, in which the central element is a black-and-white screenprint of a photograph placed behind the car-door window. This screen printed photograph shows a "group of whites castrating a black man they have caught sharing a drink with a white woman" (Armstrong and McGuire, 1989). If the viewer does not want to see this "minority striving", he can roll the window down.

4. CONTEMPORARY TRENDS

4.1. The Eighties

The New Realists of the 1970s have brought the sense of visuality into their works. The new generation is now well understands what the camera is incapable of capturing or eliminating. Chuck Close have made giant portraits which he painted by a detailed brush technique on the photographs he has taken as a subject. The photographic image is also a dominant part of Conceptual art. Series of photographs printed in offset or silkscreen, were the records of artists' actions or processes. Many artists have issued prints in this form, among whom Joseph Beuys can also be mentioned.

The developments in the 1980s is more the recapitulations of the past styles. The pertinent mode of art is now pluralism, no styles prevailing over the others. This may be the end of modernism and the beginning of postmodernism. The major monuments in art, as well as in printmaking have been already created. The graffiti artists, centered around anti-social behaviour were popular with their 'bad' art. Keith Haring and Jan Michel Basquiat have made prints for their popularity. Basquiat had previously collaborated Andy Warhol for a time. Conceptual art, on the other hand, have tried to emphasize "the need for society to realize its relationships as individuals with each other, with the environment, and with the past"

(Castleman, 1988: 210). Joseph Beuys has created various multiple art works, including prints as a symbolism of his art actions.

Anselm Kiefer was another German artist who made prints as a part of his paintings. He melted techiques; he used prints and photographs as a means of conveying a process in time or space. The Italian transavandgarde artists such as Sandro Chia, Francesco Clemente, and Enzo Cucchi also made prints; they generally worked with etching and produced monotypes.

In many countries, artists were less interested in the repeatability of the print media. Their main interest is on the addition of hand colored works directly on the printing form or the print itself into their works. Thus, Clemente and Kiefer altered their prints in this way. Many artists have sought the creative parameters of the print as a result of their involvement with the medium (Castleman, 1988).

4.2. New Developments in Printmaking

The 1980s moved away from the photomechanical processing associated with Pop and showed a traditional process of printmaking whereas there is also a development in computer process. The use of computers by artists was first seen in the 1968 I.C.A. exhibition. *Cybernetic Serendipity* is referred as 'machine aided creative processes' and a computer graphics section had displayed a series of prints made by computer-driven plotters, including images from the Boeing Aircraft Corporation. In 1983, Harold Cohen brought his own programme, Aaron, which produced an endlessly varied series of drawings in Cohen's own style, to Tate Gallery. Large scale

exhibitions first took place in 1988 during Art and Computers show organized by the Cleveland Gallery in Middlesbrough, Britain. In the following year, an other print exhibition, *Electronic Print*, was displayed at the Arnolfini Gallery, Bristol. It was this exhibition in which the phrase 'electronic print' was added to the vocabulary of printmaking (Grego, 1993).

Today, while some printmakers are exploring the new uses of photographic material, such as video, still photography, and image scanning technology, a younger generation is producing 'Computer Art', in a resembling practice during the nineteenth century, when painting was claimed to be dead by the invention of photography.

> In the transitory period, while printmakers are absorbing and trying to come to terms with this new culture, visual art products may well, at times, appear anomalous; the photographic cibachrome presented as a fine art print, the inkjet print as photograph (Grego, 1993: 14).

Although printmaking may appear to be have lost its impression in the 80s, artists such as Clemente, Longobardi, and Chia, has continued printmaking within its complex technigue. Also, some other artists, such as Michelangelo Pistoletto who used silkscreen on mirrored surfaces, or Cucchi who used different printmaking techniques on the same surface, have applied the medium in their arts (Howthorne 1986).

On the other hand, Richard Hamilton have established photography as a legitimate medium for both 'paintings' and prints, and he did the same with computer technology, as it was broadcasted on 21 April 1993 on the TV programme QED, *Arts and Chips* on BBC Two. His

fourteen color screenprint *Kent State of 1978* is famous recording the shooting by the National Guard of a student demonstrating against US involvement in Vietnam. It was produced in a large edition of 5000 and was sold in Britain for 15 pounds each through *The Observer* color magazine. His print appeared in QED, brought together images from the mass media of 'things significant to the life we now lead' which was a subject matter of Pop art -man, woman, food, history, newspapers, cinema, TV, domestic appliances, cars, space, comics, telephones, information- in an amusing but tragic manner (Gilmour, 1993).

Computer Assisted Printmaking is a new area in printmaking. Printmakers are using computer software to generate the existing images integrating with traditional printmaking processes. Computers simply simulate many procedures used in other media in a great speed and flexibility. The stored electronic record can redevelop numerous times. Electronic collage and image processing offers various richness which is difficult to achieve through traditional processes. However, although new technologies permit large scale images, the cost is expansive.

A well known artist, Sherrie Levine, for example, has made her *Meltdown* beginning with a computer generated color analysis of four modern paintings -by Monet, Kircher, Mondrian, and Duchamp. She has broken each painting into a grid of 12 rectangular fields and reproduced the resulting pattern as a woodcut, by juxtaposing new and old technologies. David Hockney, on the other hand, transmitted his prints by fax and he submitted them to the 1989 Biennale in Sao Paulo electronically. They are not for sale, and it is impossible to

mention an edition of that work in any conventional sense (Princenthol, 1990).

Some younger artists are exploring different approaches of printmaking, which are parallel with the developments in the concept of fine arts. During an exhibition in Bonington Gallery, Nothingham Trent University, on January in 1993, 68 works by 22 artists were showed. Among them, Elaine Schemilt's *Installation,* which was displayed in relation with the gallery space, consisted of a black image and it is described in Mike North's article in *Printmaking Today* as follows:

> photosilkscreen onto a white latex sheet which was tensely stretched within a vertical metal frame. The profile image of the naked artist seated and partially bound to a chair struggling to free herself, but becoming re-entangled in some already loosened bonds ... On the floor at right angles in front of the centre of the frame lay a human figure completely covered by a black rubber sheet reminiscent of black body bags used to remove corpses. Flanking this central corpse were seven (three on one side, four on the other), white latex oblong and square soft bolsters whose top surfaces were photo-silkscreened in black with images of frontal views of parts of a naked woman. A strange tension was set up between the vertical 'tensioned' image and the softer and distorted bolsters flanking the calm blanketed corpse (North, 1993: 14).

Although some of the prints did not incorporate three-dimensional elements in the mentioned exhibition at all, the majority of works had explored various printmaking processes in a meaningful way.

With the rise of post-modernist approaches in 1990s, the value judgements about art works began to be inspired by the qualities of communication. Artists such as Jenny Hoeltzer and Barbara Kruger helped a lot to activate the dialogue between information, art,

object, and replication. They utilize the communicative possibilities of the multiple to produce works beyond modernism.

5. CONCEPTUALIZATION OF THE HISTORICAL MATERIAL

5.1. Thoughts on Photography

Charles Baudelaire, in his article "The Salon of 1859" (1955), stated that Daguerre was a Messiah of God who listened to the prayers of multiplication, and he seperated the art of painting from photography. Art of painting is a divine activity, whereas photographing is only an action. The camera of the machine is like the "attic-windows of the infinite" (124). This industry is invading the territories of art and becoming an enemy for it; but as the photography is naturally multiple, it has only got a supplementary role to "enrich the tourist's album" (125). In Baudelaire's view, the painter, on the other side, paints his dreams, not what he sees, and if we consider the products of a material science as beautiful it may diminish the faculties of judging and feeling which are the most immaterial aspects of creation.

Peter Galassi, in his book *Before Photography* (1981), aims to concentrate on the issues of Western pictorial tradition which gave birth to the invention of photography. He remarks that perspective tradition of the Renaissance had established new norms in visual perception. The synthesis of the Renaissance artists helped a lot to the analysis of the 19th century artists. This transformation of the accumulation of pictorial experiment coincides with the invention of photography. The two types of sketches during the Renaissance time,

ébauche and *étude*, were records of imagination and of observation respectively; the imagined ideal composition and the reality. In Galassi's view, in the early nineteenth century, landscape sketches become a special vehicle for the artistic transformation. They "present a new and fundamentally modern pictorial syntax of immediate, synoptic perceptions and discontinuous, unexpected forms. It is the syntax of an art devoted to the singular and contingent rather than the universal and stable. It is also the syntax of photography" (25). However, what photography records is the visible aspects of a physical reality, determined by a certain point of view in a particular moment and light and this "has shaped our conception of modern art" (29).

John Berger (1989) also stresses light and time as the raw materials which made photography a strange invention. According to Berger, every photograph presents the event photographed and a message of discontinuity. It is an evidence of thereness nourishing our sense of being. Yet, there is a difference between photographic images and images stored in our memory. The informational image of a photograph do not have a meaning; we constitute a meaning as a response to the known and unknown. We lend a photograph a past and a future with our sense of passing of time. As the figuration in photography is not implemented by experience or consciousness unlike the figuration in drawing, it does not possess a language but it quotes from appearances; these appearances themselves constitute a language. Berger thinks that a photograph quotes from appearances but it simplifies them when quoting, so we are moved by the photograph's fullfilment of an expectation which is the unmistakable meaning articulated by the camera. "When this happens, we suddenly find

ourselves at home amongst appearances, as we are at home in our mother tongue" (129).

Marshall McLuhan (1974) stresses that, photography isolates single moments in time; camera tends "to turn people into things, and the photograph extends and multiplies the human image to the proportions of mass-produced marchandise" (201). It turns everything into dreams which can be afforded by money. At the same time, it thought man to make visual reports without syntax. The photograph and movie restored gesture for the human experience, the human postures arrested by the snapshot of photography directed more attention to physical and psychic posture. Thus, the painter gave up to depict the world that could be photographed, and it was time for expressionism and abstract art revealing the inner process of creativity. "...the photograph really transcends the pictorial by capturing the inner gestures and postures of both body and mind, yielding the new worlds of endocrinology and psychopathology" (216).

William Ivins, who was an early theorist of printmaking and visual communication, thought that among all the graphic media photography is the only one in which images

> ... were not subject to the omissions, the distortions, and the subjective difficulties that are inherent in all pictures in which draughtsmanship plays a part. Here were exactly repeatable visual images made without any of the syntactical elements implicit in all hand-made pictures (Ivins, 1953: 122).

This passage from Ivins' **Prints and Visual Communication** was also quoted by Estelle Jussim (1983: 10), in whose view, Ivins wrote his book when information theory was too young, when cybernetics was

still concerned as a subject far away from being related with the philosophy of art. She thinks that the problem with Ivins' argument is caused by his using the concept of *syntax*, which should be replaced by new communication vocabulary. In that case, the internal conflict observed in Ivins' work can be avoided. Jussim (1983) proposes that Ivins should have used the concepts of *message*, *channel*, and *code*. She defines and describes those concepts as follows:

> A *channel*, obviously, is the physical medium of communication. A *code* is the structure imposed upon a message which permits that message to be transmitted. A *code* can be said to be composed of *message units* which are appropriate to transmission via a spesific physical channel... In all forms of communication, the *channel* and the *code* together form the *medium*. In the case of the graphic arts, the channels of wood, metal, paper, ink, in combination with lines, dots, halftones, or solid areas, provide the characteristic effects of what we label wood engraving, etching, and so on. A visual code transmits a visual *message*, the meaning of which rests upon many predetermined factors, e.g., culturally accepted symbolism or socially structured kinesic responses. The *meanings* transmitted do not concern us here. What does concern us is the manner in which the channel and the code together structure the transmission of visual messages, and what the influence of that structuring is on our ability to receive and respond to such messages (12).

Then, Jussim concentrates on the concepts of *message* and *medium*. She reminds that messages "cannot be extracted *pure* from media". This point has been first stated by Marshall McLuhan. In his much discussed essay, "The Medium is the Message" (1974), McLuhan was concerned with the interactions caused by the use of media in a social environment. According to Jussim (1983),

> McLuhan was observing that the use of each medium by a society tends to restructure the social organization of that society and the psychology of the individuals living in it. That restructuring and reconditioning is the "message" of the medium; we are ordinarily unaware of

> this message because the media environment is so pervasive it is like the air we breathe (13).

Jussim observes that, under such conditions, "the message of a visual medium itself can sometimes interfere seriously with the message which a sender desires to transmit". In her view, the most important point is to see that "visual communication, like all other forms of communication, has a material base", which can "convey to our minds certain visual implications". She compares the way visual codes work with the impact of language:

> just as the very structure and vocabulary of the English language impose both potentialities and limitations on thought and expression, so too the structure and vocabulary of visual codes impose their own potentialities on visual communication (14).

Jussim criticizes Ivins because he kept the idea that, in printmaking, "the subjective distortions" of the the illustrator - in Jussim's terms, "the primary codifier" - were completely avoided because the camera has a "mechanical objectivity", and in a similar way, "that the arbitrary, technologically or culturally determined routines of the secondary codifier, the hand engraver, were made obsolete and unnecessary by lens and the emulsion". According to Jussim, this is entirely fictitious since "there is a possibility that 'photography' can be *subjective*". What a photograph records can be controlled by an individual. Besides, the lens or emulsion have "technological limitations". In addition, some "artistic i.e., subjective, manipulations" are possible "in the making of photographic positives on paper" (298).

As far as the claims of objectivity are concerned, Jussim observes that this is caused by the fact that photography supplies the eye with an illusion difficult to distinguish from normal human vision:

> Using a lens which approximates the normal range of human vision, and a light-sensitive emulsion which has condensed scanning characteristics approximating normal human differentiation of textures, the process of photography can supply a closer approximation to three-dimensional reality, as transposed through molecular codes on a flat surface, than any other graphic technology... Since photography - as we describe it here - is posited as imitating the characteristics of human vision, with the notable and all-important distinction that it represents the world as flat rather than as three-dimensional, the recording made of a message about an original must be understood to be as much a *coding* of a message about an original as that used by any other graphic process... Since the original of the message may be grossly large compared to the message as recieved on paper, our interpretation of the forms and textures is based on an "as-if" response. We behave with photographic messages as if they were the original, since we can intellectually equate a small paper image with the tiny retinal image of a far object (298-299).

At this point, it may be necessary to make a comparison between Jussim's view and Roland Barthes' on photography. Barthes (1984), although using such terms as *code* or *sign*, seems to think differently:

> In order to move from the reality to its photograph it is in no way necessary to divide up this reality into units and to constitute these units as signs, substantially different from the object they communicate; there is no necessity to set up a relay, that is to say a code, between the object and its image. ... Thus can be seen the special status of the photographic image: *it is a message without a code;* from which proposition an important corollary must immediately be drawn: the photographic message is a continuous message (17).

Barthes thinks that all the 'imitative' arts such as drawings, paintings, cinema, theatre, at first sight, seem to convey messages without codes. However, Barthes finds a kind of duality in their

messages, which he defined as: "a *denoted* message, which is the *analogon* itself, and a *connoted* message, which is the manner in which the society to a certain extent communicates what it thinks of it" (17); whereas photography, unlike other means of representation, seems to be a direct imitation of reality:

> "The photograph professing to be a mechanical analogue of reality, its first order message in some sort completely fills its substance and leaves no place for the development of a second order message" (18).

However, Barthes thinks it probable that the the message of the photograph is connoted, too. The difference is that connotation can not be percieved in the message itself but it can be concluded from the processes of production and reception of the message (19). Then, there seems to be a paradox in photography: two messages co-exist in it, "the one without a code (the photographic analogue), the other with a code (the 'art', or the treatment, or the 'writing', or the rhetoric, of the photograph)". According to Barthes, the paradox is not the consequence of the relation between "a denoted message and a connoted message" since it is the case with "all the forms of mass communication". He thinks that, in photography, "the connoted (or coded) message develops on the basis of a message *without a code*". This causes a structural paradox, which, inevitably, leads to an ethical one:

> "When one wants to be 'neutral', 'objective', one strives to copy reality meticulously, as though the analogical were a factor of resistance against the investment of values (such at least is the definition of aesthetic 'realism'); how then can the photograph be at once 'objective' and 'invested', natural and cultural? It is through an understanding of the mode of imbrication of denoted and connoted messages that it may one day be possible to reply to that question" (20).

Although there seems to be a contradiction between Barthes and Jussim, it may be considered as a difference in their handling the matter. Jussim is quite sensitive about distinguishing "the message of the medium" from the meaning whereas in Barthes' argument, this distinction is not so clear. In order to overcome this problem, it will be helpful to turn back to Barthes' "first order message". He thinks that this message is not coded since it constitutes a perfect analogue of reality. Jussim, basing her argument on McLuhan, considers the photograph as *coded* so as to approximate normal human vision. In other words, what photography represents is not the reality itself but an image of the reality as flat on a paper in such a way that one can identify a photographic image with a retinal image in one's mind. Thus, it is possible to state that Barthes, who is so close to Jussim in observing various aspects of the photographic process, gets closer to Ivins in his interpretation of the visual message achieved by photography. Consequently, he finds structural and ethical paradoxes in photography. If his formulation - a message without a code - is changed as *a message coded so as to approximate normal human vision*, it becomes easier to understand the way one is lead to react against a photograph. When one identifies a photographic image with the visual images one receives from the objects around, the processes of production and reception of the photograph becomes very important. As Barthes (1984) observes,

> ... the the code of connotation was in all likelihood neither 'natural' nor 'artificial' but historical, or, if it be preferred, 'cultural'. Its signs are gestures, attitudes, expressions, colors or effects, endowed with certain meanings by virtue of the practice of a certain society" (27).

Barthes, like Jussim, finds a relationship between the perception of photographs and language:

> If, as is suggested by certain hypotheses of Bruner and Piaget, there is no perception without immediate categorization, then the photograph is verbalized in the very moment it is percieved; better, it is only percieved verbalized. ... From this point of view, the image - grasped immediately by an inner metalanguage, language itself - in actual fact has no denoted state, is immersed for its very social existence in at least an initial layer of connotation, that of the categories of language. We know that every language takes up a position with regard to things, that it connotes reality, if only dividing it up, the connotations of the photograph would thus coincide, *grosso modo*, with the overall connotative planes of language (Barthes, 1984: 28-29).

Victor Burgin (1984), handles the problem in full detail and observes a parallel between material world and language:

> Material production and language production both stem from the same need to order the environment. The human labourer must learn how to differentiate and compose his materials. He must learn how to form what is natural (the stone, his cries) into what is cultural (the axe, the word) (45).

Similar to Barthes position, Burgin (1984) considers the way people percieve the objects possible only within an ideology:

> In the very moment of their being percieved, objects are placed within an intelligible system of relationships (no reality can be innocent before the camera). They take their position, that is to say, within an *ideology*. By ideology we mean, in its broader sense, a complex of propositions about the natural and social world which would be generally accepted in a given society as describing the actual, indeed necessary, nature of the world and its events. An ideology is the sum of taken-for-granted realities of everyday life; the pre-given determinations of individual consciousness; the common frame of reference for the projection of individual actions. Ideology takes an infinite variety of forms; what is essential about is that it is contingent and that *within it the fact of its contingency is suppressed* (45-46).

As a consequence of being embedded in an ideology, objects have gained some sort of meaning before being photographed:

> ... the naturalness of the world ostensibly open before the camera is a deceit. Objects present to the camera are *already in use* in the production of meanings, and photography has no choice but to operate upon such meanings. There is, then, a 'pre-photographic' stage in the photographic production of meaning which must be accounted for (Burgin, 1984: 47).

As for the relationship between an object and its photograph, Burgin bases his argument on the views such theorists as Umberto Eco and Irwin Panofsky, who have carefully distincted a photographic image from its referent, which may be considered to support Jussim as opposed to Ivins or Barthes. Burgin supports his point by some examples:

> In an ingenuous assumption the photograph is held to *reproduce* its object. However, the relationship between a photographic image and its referent is one of reproduction only to the extent that Christopher Wren's death-mask reproduces Christopher Wren. The photograph abstracts from, and mediates, the actual. For example, a photograph of three people grouped together may, in reality, have comprised a live model, a two-dimensional 'cut-out' figure, and a wax dummy. In the actual presence of such an assembly I would quickly know them for what they were. No such certainty accompanies my cognition of the photographic group. It is precisely the *difference* between our comprehension of an object and our comprehension of its image that Eco takes as the starting-point of the observations which led him to reject both Barthes's notion of the 'uncoded' message and also the 'dogma of double articulation' (Eco, 1972: 201; cited in Burgin, 1984: 61-62).

Quite similar to Jussim's point of view, Eco's methodology depends on some reference to information theory and to the psychology of perception. He argues about the so called ''digital', discontinuous character of language as opposed to the 'analogical', continuous nature of of the image'. Eco reminds us about the computer systems

used for storing, transmitting and displaying pictures, "in which the apparently analogical has been interpreted in digital terms". As it is related by Burgin, Eco "also points out that modern reproductive processes, from half-tone blocks to TV images, present us with discontinuous systems". According to Burgin, a more important point by Eco is that he "reminds us that there can be no uncoded visual message, as the act of perception itself is a decoding operation" (Eco 1984; cited in Burgin 1984: 62-63).

Burgin thinks that a similar distinction can be made in language itself. In his view, when Ferdinand de Saussure said that the linguistic *signifier* is a sound-image, he did not mean a physical phenomenon but "the psychological imprint of the sound ... the impression that it makes on our senses" (Saussure 1974: 13; cited in Burgin 1984: 63). As far as the visual channel is concerned, it is also possible "to distinguish between the physical and the social fact". On this point, Burgin (1984) refers to Panofsky's views:

> "When an acquaintance greets me on the street by removing his hat, what I see from a formal point of view is nothing but the change of certain details within a configuration forming part of the general pattern of color, lines and volumes which constitutes my world of vision".
>
> In identifying the configuration as an object (gentleman) and the change of detail as an event (hat-removing) he observes that he has overstepped the limits of purely formal perception and entered a sphere of meaning (Panofsky cited in Burgin 1984: 63).

In order to examine perception in a closer way, Burgin, again, refers to Eco, who states that "the brute stimuli of a given perceptual field are ordered and interpreted according to learned schemes":

> There's a principal of economy, both in the recollection of percieved things and in the recognition of familiar objects, and it's based on what I shall call 'codes of recognition'. These codes list certain features of the object as the most meaningful for purposes of recollection or future communication: for example, I recognize a zebra from a distance without noticing the exact shape of the head or the relations between legs and body. It is enough that I recognize two pertinent characteristics - four-leggedness and stripes (Eco, 1984: 33; cited in Burgin 1984: 63).

Eco terms such features 'signs', which we abstract from our "sense impressions which constitutes our actual perception of an object. The unordered elements from which signs are constructed Eco calls 'figures'. These are the various elements of perception, meaningless in themselves ...". Eco considers them as "conditons of perception (e.g. subject -background relationships, light contrasts, geometrical values) transcribed into graphic signs according to the rules of the code". (Eco, 1984: 36; cited in Burgin, 1984: 63-64).

Quite similar to Jussim's argument, Burgin, following Eco, states that "the photograph ... is not *innocent* of arbitrariness for its being in a more directly causal and apparently unmediated relationship to its referent, because the interaction between the photographic emulsion and the light reflected from the object is selectively controlled". The codes of transmission, which are termed by Eco *tonal codes,* "carry the optional variants which are equivalent to the prosodic features of natural language. A photograph, for example, may exhibit 'hard' or 'soft' focus, large or small grain, and thus carry such connotational oppositions as masculine/feminine (Eco, 1984: 36; cited in Burgin, 1984: 65).

One can conclude the issues on photography with a quotation made by Burgin from Christian Metz so as to reinforce Jussim's argument. Burgin states that,

> the partial similarities between photographic perception and everyday perception "... are not due to the fact that the first is natural, but to the fact that the second is not; the first is codified, but its codes are in part the same as those of the second. The *analogy*, as Umberto Eco has clearly shown, is not between the effigy and its model, but exists - while remaining partial - between the two perceptual situations" (Metz, 1974: 276-77; cited in Burgin, 1984: 66).

5.2. Issues on Mechanical Reproduction of Art Works

The advent of photography has been welcomed in the realm of visual communication with the assumption that it has made it possible to have "a direct copy of reality". However, the explosion of printmaking in 1960s as a consequence of the technical developments are not welcomed by some thinkers of the period.

Walter Benjamin calls attention to the mechanical aspects of making art in his famous article "Work of Art in the Age of Mechanical Reproduction" (1969). With the printmaking processes, art became mechanically reproducable with accelerated intensity. In the nineteenth century, technical progresses put the printmaking products into daily market in large numbers and in daily changing forms. The advent of photography freed the hand of the most important artistic functions. In 1900s technical reproduction had reached a standard to reproduce all transmitted works of art. Benjamin thinks that the reproduction of a work of art is in lack of the original's uniqueness which can be revealed by chemical and physical analyses. Also, the concept of authenticity which is

prerequisite to an original art work is impossible to be reproduced technically. Yet, especially in photography, technical reproduction can put the copy of the original into situations which are unattainable for the original itself with the naked eye. Mechanical reproductions emancipates the work of art from its dependence on ritual and changed this ritualistic base into politics. Works of art have received an exhibition value; and with this exhibition value, they gained new functions, such as the artistic function, which may later be regocnized as incidental as in photography:

> Bertolt Brecht, on a different level, engaged in analogous reflections: 'If the concept of "work of art" can no longer be applied to the thing that emerges once the work is transformed into a commodity, we have to eliminate this concept of the very thing as well. For it has to go through this phase without mental reservation, and not as noncommittal deviation from the straight path; rather, what happens here with the work of art will change it fundamentally and erase its past to such an extend that should the old concept be taken up again -and it will, why not?- it will no longer stir any memory of the thing it once designated' (Brecht cited in Benjamin, 1969: 392).

On the other hand, as Benjamin (1969) states, photography brought back the cult value of the works of art. It is generally accepted that, artistic production has begun with ceremonial objects to serve in a cult. The matter is not their being on view but their existence. The focal point of early photography portraits is the cult of rememberance of loved ones, absent or dead. The reception of the paintings by a large public is by the appeal of mechanical reproductions of art works to the masses, occasioned by photography.

According to Benjamin (1969), the essential constituents of *aura* in the art works are authenticity and their place in the tradition. Mechanical multiplication is the end of this *aura*. By means of their

photographic reproduction, the art works are detached from their original ritual place and made avaible for the imposition of new meanings. "The authenticity of a thing is the essence of all that is transmissible from its beginning, ranging from its substantive duration to its testimony to the history which has experienced" (387). *Aura* is the "formulation of the cult value of the work of art in categories of space and time perception". If *aura* is represented as a "unique phenemenon of a distance however close it may be"; the distance here makes the object (work of art) unapproachable, and unapproachability is the major quality of the cult image. "...the mechanical multiplication of the print spells the end of... *aura*" since the "uniqueness of the 'original' art work is...its authority as an object worthy of respect and its place in ...tradition" (389). The aura of the work of art withers in the age of mechanical reproduction.

On the contrary, Paul Mattick Jr. in his article "Mechanical Reproduction in the Age of Art" (1993) says that originality depends on the type of the art works. The duplication of 'autographic' works can not be counted as genuine, but for 'allographic' works (like musical symphonies), there can not be a distinction of copy and original:

> Autographic works can be either singular or multiple by nature: 'the example of printmaking refutes the unwary assumption that in every autographic art a particular work exists only as a unique object... . The only way of ascertaining whether a print is genuine is by finding out whether it was taken from a certain plate' (Goodman, cited in Mattick, 1993: 129-130).

Photography typifies a mode of 'reproductions without originals'. The concepts of 'authenticity' and 'original art work' are empty with respect to some works such as prints, photographs, and casts.

> ...we can define "originality" generally in terms of standard process of production of the final object (photographic prints, etchings, sculptures) from the relevant original (negative, plate, plaster model), and then introduce additional categories as necessary to make whatever distinctions seem important, such as "printed by the artist", "printed under the artist's supervision", "made under the licence", etc. (Mattick, 1993: 130).

There is a distinction between original and replica. The idea that one can make any number of prints from a negative brings a contrary question of asking 'for the "authentic" print'. This contrast between original and copy, gives *aura* to the work, which is associated with uniqueness.

Mattick has also referred to Susan Lambert's article "The Image Multiplied":

> ...the importance that the regulations attached to a particular kind of manual involvement with the making of the printing surface on the part of the artist makes it appear in retrospect that they were framed also as a counter-movement by the old guard against a new generation of artists who were finding a powerful and personal means of expression in the photomechanical techniques of popular visual communication... (Lambert cited in Mattick, 1993: 135).

Thus, Mattick comes to a conclusion that the mechanical reproduction of art works contributed to the creation of aesthetic *aura*.

Nelson Goodman (1981) classifies art as autographic and allographic:

> ...printmaking is two-staged and yet autographic. The etcher, for example, makes a plate from which impressions are then taken on paper. These prints are the end-products; and although they may differ appreciably from

> one another, all are instances of the original work. But even the most exact copy produced otherwise than by printing from that plate counts not as an original but as an imitation or forgery.
>
> ...the example of printmaking refutes the unwary assumption that in every authographic art a particular work exists only as a unique object. The line between a singular and a multiple art. ...etching is singular in its first stage -the plate is unique- and painting in its only stage. But this hardly helps; for the problem of explaining why some arts are singular is much like the problem of explaining why they are autographic (114-115).

He also refers etching like music, as they both have two stages and as they are both multiple in their second stages of being the end products. Yet, the difference is that printmaking is autographic in both stages, whereas music is not in neither stage. Thus, the situation of painting and etched plate is the same because the actual object is produced by the artist. Prints and musical performances are parallel, the only difference is the absence of notation. "To be original a print must be from a certain plate but need not be printed by the artist. Furthermore, in the case of a woodcut, the artist sometimes only draws upon the block, leaving the cutting to someone else..." (119).

William Ivins, an early theorist of visual communication, has some doubts about what has been recorded by printmaking:

> ...copying a picture, that is to making a visual statement about a visual statement, the copyist felt under no obligation to be faithful to either the particular forms of the linear syntax of the earlier draughtsman he thought he was copying. ...in changing the syntax he completely changed both the facts and the story" (Ivins, 1989: 61).

In fact, as far as copying is concerned, time has shown that none of the traditional printmaking techniques are so successful in

photography in achieving an illusion of reality. However, when artists put the commercial imagery and photography directly into their art in 1960s, they questioned the enterprise of photographic and reproduced imagery. The photomechanical process of reproduction encouraged direct quotations from diverse sources; "...by the end of the sixties, the object and its representation were interchangeable" (Mellot et al.,1988:189).

This new approach of the sixties redefined the relationship of the artists to the medium. All the rules and notions of originality were freed from work and besides, the appropriated styles and techniques from the commercial sector were welcomed. Thus the print have entered into a new kind of collaboration:

> Printing techniques...had become the focus of meaning...(prints of the sixties were amazingly sensuous and synesthetic), but they were the basis for the development and identification of new symbolic languages, the facility human beings have for taking one thing for another. Language, therefore, was the focus of the new printed art. The print, be it classical etching or photoscreenprint, was no longer a vehicle for narrative or expression. ... Because the message was so often located in the medium and in the viewer's habitual reactions to known media situations, the subject of art became increasingly "things the mind already knows" (Field, 1987: 14).

The extraordinary significance of modern prints of the last decades lies in their size, subject-matter and meaning. With the rise of other forms of visual imagery, including the photograph and photomechanical reproduction, modern painting recognized the styles of newer technological media. As a result, the print was sprung loose from its role subordinate to painting or sculpture. A print always conjoins art and technology and it is valued for its mechanical and technical aspects in addition:

> ... it is understandable that prints exert a technical fascination, because they are, after all, mechanical objects. In some deep and unrationalized manner, they tap one of the most fundamental substrates of technological culture: man's need for the mechanical replica or the repeatable image, that is, visual language. Yet man does not live by mechanical fascination alone; there must be significant meaning (Mellot et. al., 1988: 190).

Inspired by the issues and problems put forward above, a personal work was produced with the expectation that, with that work, a personal perspective can be achieved on those issues on a concrete basis.

6. THE WORK

Kendine İyi Bak is planned to be exhibited in a suitable gallery together with its posters and invitation cards. The invitation card was produced simply on A4 papers in the form of a picture frame, a shiny silver rectangular shape in the middle and the words "Kendine İyi Bak", arranged around this rectangle by using the whiteness of the paper on black color (Plate 1). The shiny silver colored frame can be perceived as a mirror as well as a surface to be scraped out. These words can be interpreted in English both as "Watch Yourself", "Look at yourself", and "Take Care of Yourself".

6.1. Physical Definition

The work consists of three pieces. The first and the biggest one is a one piece canvas tissue with 12 meter length and 1.65 meter width. This tissue is installed by the help of 14 wooden legs, each 2 meters long, standing on iron tripods with curved ends. At the top, wooden sticks, passing inside the canvas tissue help to keep the work stand still. In the middle of the installation, there is a "room" shaped part of 1.17 x 1.17 x 1.17 meter sizes. At the back side it is open and one can enter inside the "room". The sections on the left and on the right of the "room" is 4 and 4.5 meters long, respectively. On each section, there are photosilkscreened photographic images, 6 on the left and 5 on the right. Two photographic images take place on the exterior surface of the front

"wall" of the "room" shaped section, and there are three more inside the "room", at the backside of the work.

The second piece is a wooden frame with 4 meter length and 2 meter width which has wooden supports at every one meter in the shape of a grid, dividing the whole frame into eight parts like a big window frame. The size of the wooden bars is 10 x 10 cm. A canvas tissue is streched behind this frame, so that one can think he/she is looking through a window from outside to the interior. This piece is hanged on the wall just opposite to the first long piece. Five photographs were silkscreened on this canvas.

The third piece is a 35 x 41.5 x 1.5 cm album with a black cover. On the inside covers of the album, there are three photosilkscreened images on white drawing paper of 40 x 32 cm. They are stuck inside the covers of the album. In the album, there is a pile of white thick bristol papers of 33 x 33 cm stuck side by side, like a miniature copy of the installed work. On these thick papers, the photographs used on the first piece were silkscreened.

6.2. Technique

The photographs used in the work were enlarged to 1.20 x 80 cm by a special photocopying system. The 12 x 1.65 meter canvas tissue was sewed to form 14 parts in accordance with the width of the enlarged photographs so that, between every two photograph, a wooden leg can be installed from behind. Wooden sticks can pass through the tissue at the upper side to form a rectangular shape for each photosilkscreened image and hold them stand still. The tissue is

painted with white plastic paint. The enlarged photographs are transferred on the tissue by screenprinting in black color. Then, the faces of the human figures in these photographic images are masked with plastic cover and silver paste is adopted with the help of an ink roller on each panel. When the masks are uncovered, the faces of the figures remained white.

The other canvas tissue is also painted with white plastic paint. Three photographs with images of human figures are enlarged to life size. A photograph of a lace curtain from a magazine is photocopied and enlarged to a suitable size step by step and made double. These five images are photosilkscreened on the canvas with black ink so as to constitute a composition. The wooden frame in the form of a grid is put on the canvas tissue and the tissue is streched from behind so that the wooden grid has become a part of the work also. The frame is only varnished.

For the album, the three photographs with human figures, except the lace curtains are screenprinted in negatives with black ink. These three photographic images are stuck inside the cover so that they look like the composition in the wooden frame. Thick bristol papers in the album are first screenprinted with silver color ink to form images in 30 x 30 squares. The negative versions of the same photographs which have been used in the first installation are screenprinted on the silver colored square surfaces. The bristol papers with images are stuck side by side in the same sequence as in the big canvas tissue. One can open it not like the pages of a book, but like a folded screen.

6.3. Subject Matter

For the first part of the work -the one on the long canvas tissue- 15 photographs are chosen from the family album. They are all dated to the years around 1930s and 1940s, showing the images of some relatives in ordinary daily scenes such as together with some friends, during an engaging ceremony, with their child etc. They are arranged in an imaginary, episodic life-cycle. The original dates of the photographs are not taken into consideration during this arrangement (Plate 2).

The first photograph shows two young girls sitting in a garden on the grass with white lace collars. Second photograph belongs to another young girl posing in the garden with an interesting hair dress. These two photographs are put in a composition so as to show the three girls in the same garden; two of them are sitting on the grass and the other is standing a few meters behind them (Plate 3). The third photograph is a memorial one, showing the family members during the engaging ceremony of the young girl standing in the garden. Ten people, including a baby sitting on the grandfather's knees are staring at the camera (Plate 4). In the next one, the new married couple, far away from their families, are posing to the camera. A small village can be seen at the background. The husband is a soldier and probably they moved to this far region of the country. (Plate 5). The fifth photograph shows 6 people sitting in front of the door of their house (Plate 6). The ceremony photograph is in the middle of the first section and all the other four photographs may be considered to be watching this ceremony. This

first section of the long tissue can be named as the youth period of a human's life (Plate 7).

The "room" shaped section is in the middle of the whole work. It has three panels standing with right angle with one another. The first "wall of the room" is pure white, just like the outer walls of an old small house in the country. The wall in the middle is showing two young soldiers sitting on small chairs, in front of a house or a garden's wall, with babies on their knees. The shadow of a passanger is seen on the wall behind the soldiers, and the shadow of the photographer has fallen on the ground, just at the center of the photograph (Plate 8). At the top of the third wall, a woman, sitting in front of the window is reading her book and probably looking after her children on the soldier's knees (Plate 9). Inside the "room", three photographs are silkscreened on the back side of the canvas tissue with black ink. As the backside is not painted with white plastic color, the creamy color of the tissue together with black ink and silver paste, developed a shadowy impression, like the shadowy back rooms of the houses. The three photographs belong to a teenager, a couple drinking coffee in their living room, and a young mother embracing her child with love, respectively (Plate 10,11,12). They are ordinary domestic scenes that can be seen in any house. This section can be considered as the maturity period.

The third section consists of five exterior scenes. The first one shows some friends sitting in a garden around a table and speaking cheerfully (Plate 13). Next to them, two women and a child are posing to the camera in the garden of their house (Plate 14). Two other girls are sitting on the grass and they are as if looking to

the group of soldiers sitting under the trees next to them (Plate 15). That photograph shows the soldiers during a rest; they all look very tired and old. The last sceene is a group of soldiers departing on a sledge pulled by horses (Plate 16). This third section can be called the agedness (Plate 17).

The second section of the work, streched on the wooden frame, consists of five photosilkscreened images. One of them is of an old photograph from the family album, showing two men, one is stting on an armchair and the other is sitting at the back part of the same armchair, holding his friend. This takes place in the middle. At each side of this image, the screenprinted images of two different photographs of the artist take place so as to look at the two men in the middle; it seems as if they are all speaking cheerfully with each other. Images of lace curtains at both ends finish the compositon (Plate 18, 19, 20).

This two works are to be placed face to face in a preferably narrow hall, so that the figures on the first and the second works can look face to face.

The album, which was defined above physically shows all the same photographic images together, as a miniature of the whole work (Plate 21, 22,). But as the negative versions of the photographs were silkscreened this time, the black images, especially on the silver color, create a totally abstract vision.

6.4. Visual Implications

The printed image evokes two attitudes towards time. First the idea that the print should preserve for eternity the traces of past. Secondly, the printed image, by the fact of being printed, and by way of its technical constraints, reveals the act of the artist as a process of manufacture. Since the print permits the pulling of proofs from the plate in "the course of work", each proofmarking is a "state" in printmaking. Thus, the work is divided up into stages as a self-recording image, as both work and a record of a work (Mellot et al., 1988). This consideration of duality about time is also relevant to the spatial perception of a viewer against a print. First, one can consider the place where the original -the plate, the master copy- was made. Then, the place where the reproduction is carried out can be imagined. So, every print, if it is desired or not, gives some evidences that the image was reproduced later somewhere else; that is to say, it calls for a narration, a special story reserved for the process of reproduction. As it is stated above, some theorists of art and visual communication have disliked it and have regarded it as something to be eliminated in order to "purify" the paths of communication. On the other hand, some other theorists have explained that every visual message is necessarily coded since the perception itself is a decoding process.

The work which was described above was produced with the purpose of emphasizing some spatial and temporal effects. The starting points of those effects have already been implicated in the photographs collected from the family album. What is tried to be done with those images is to "re-present",or "re-code" them in such a way and in

such a setting that the viewer may experience some ambiguity in spatial and temporal categories.

Some examples of those effects can be described briefly. The costumes and some details about the places seen in the photographic images suggest that the images belong to some old photographs. The fact that photographic images are enlarged up to the approximate size of a human figure is something radical with photography; human figures on photographs are normally much smaller than the actual size. On the other hand, the images are screenprinted in black; this supports the idea that they are from old photographs. The photographic images are used in a spatial design which invite the viewer to communicate with the figures while walking among them. The long canvas tissue installed on supporters has two spatial implications: first, one can imagine oneself as if walking through a narrow street and meeting many people; second, one can consider the long canvas tissue as a curtain or as a screen on which images of some people and scenes from their lives can be watched. Since the work is designed to be installed in an interior space, this causes some spatial effects. All the scenes on the "curtain", except the ones "in the room", are exterior scenes. In order to watch the scenes "in the room", the viewer should go behind the "curtain" and "enter the room". By such an arrangement, the viewer is expected to give an "as if response" as far as the spatiality is concerned.

The canvas which is hanged opposite to the curtain is designed in the form of a window. Through that "window", the viewer can see the figures sitting and "watching" both the viewer and "the figures on the curtain". Again, the perception of space becomes ambigious. Two

female figures in "the window" are of the same person, that is the artist herself. Seeing the artist together with the figures who have supposedly lived in the past causes a problem in the perception of time. In addition, one of the persons seen through "the window" is the same man who is seen in various scenes on the long canvas tissue.

All the ambiguity about time and space, which is said to be an important characteristic of the so-called post-modernism in art, is achieved by the controlled use of the well-known effects of screenprint and photography. In this case, the ambiguity of perception is used to emphasize the spatial and temporal distance mentioned above. This way, the viewer will be enabled to "reproduce" them for her/his own "edition". Besides, one can take one of those albums to somewhere else, "set the scene", and "perform" one's own version for the third parties. This time, the human figures have been silkscreened in negatives on a silver colored surface so as to be used in "any place" for "any performance" just like shadow figures. It is even possible to "multiply" them if the "demand for personal performances" is high enough.

7. CONCLUSION

Hugh J. Merrill, on a critical discussion concerning printmaking in the United States, reports that printmaking is redefined as an expanded territory and overlapping field since 1990, meaning that the print is no longer an impression made from an original matrix, created and pulled by an artist or master printer. A stable hierarchy was established between the original work, the limited edition and the mass reproduced copy to judge aesthetic value. However, this hierarchy has been altered by postmodern concerns. The serial process of printmaking, creating multiple originals, calls into question, the originality of 'original' and authorship. Previously, the standard of value was created by the constraints of a particular discipline, but now the artist's choices are not restricted. Instead, they are based on broader cultural concerns ignoring traditional aesthetic relationships. Value is a result of information through the reproduction of a work. Art becomes valuable as a result of communication to a broader public rather than its uniqueness or rarity. The politicized image and collaborative means of production of postmodernism altered the individual gesture and originality. Art works, today travel through electronic transmission and through the multiples of print. The context of original object has changed by this action of reaching the viewer. This diversification of meaning has created a new criterion based on effect, cultural impact, and social results besides visual qualities

(Printmaking Today, vol. 3, no. 2, 1994 "American dialogue defining printmaking in the 1990s").

If the Renaissance and Baroque prints are put aside, the use of printmaking techniques from the rise of modernism up today has always focused on interpreting conflicting modes of perception and usage in order to call attention to the conventions, codes, and systems "...which we blithely accept or act upon as if they were indisguishable from each other and even consonant with reality" (Mellot et al., 1988: 188).

The attitute of contemporary artists towards printmaking is still in accordance with the conception formulated by Duchamp that the work of art is completed by the presence of the viewer. This does not mean that there is no difference in artists' way of reproducing images. On the contrary, immense developments in technology and vareity of material help artists to create images so different both in appearance and in technique. Besides, in general terms, two main tendency can be observed in artists' preferences. Some artists are more engaged in showing the potentials of the new technologies and the possibilities of visual effect. Others prefer to use printmaking techniques in more conceptual terms, considering reproduced imagery as a potential to create some settings in which the viewer can act her/his part. However, it would be unfair to claim that the difference between two attitudes is so big as far as printmaking is concerned. A material tie, sourced from the nature of printmaking combines different tendencies: a print, first of all, has a quality of communication; it reproduces a visual message in another environment and relates it to other viewers.

Plate 1

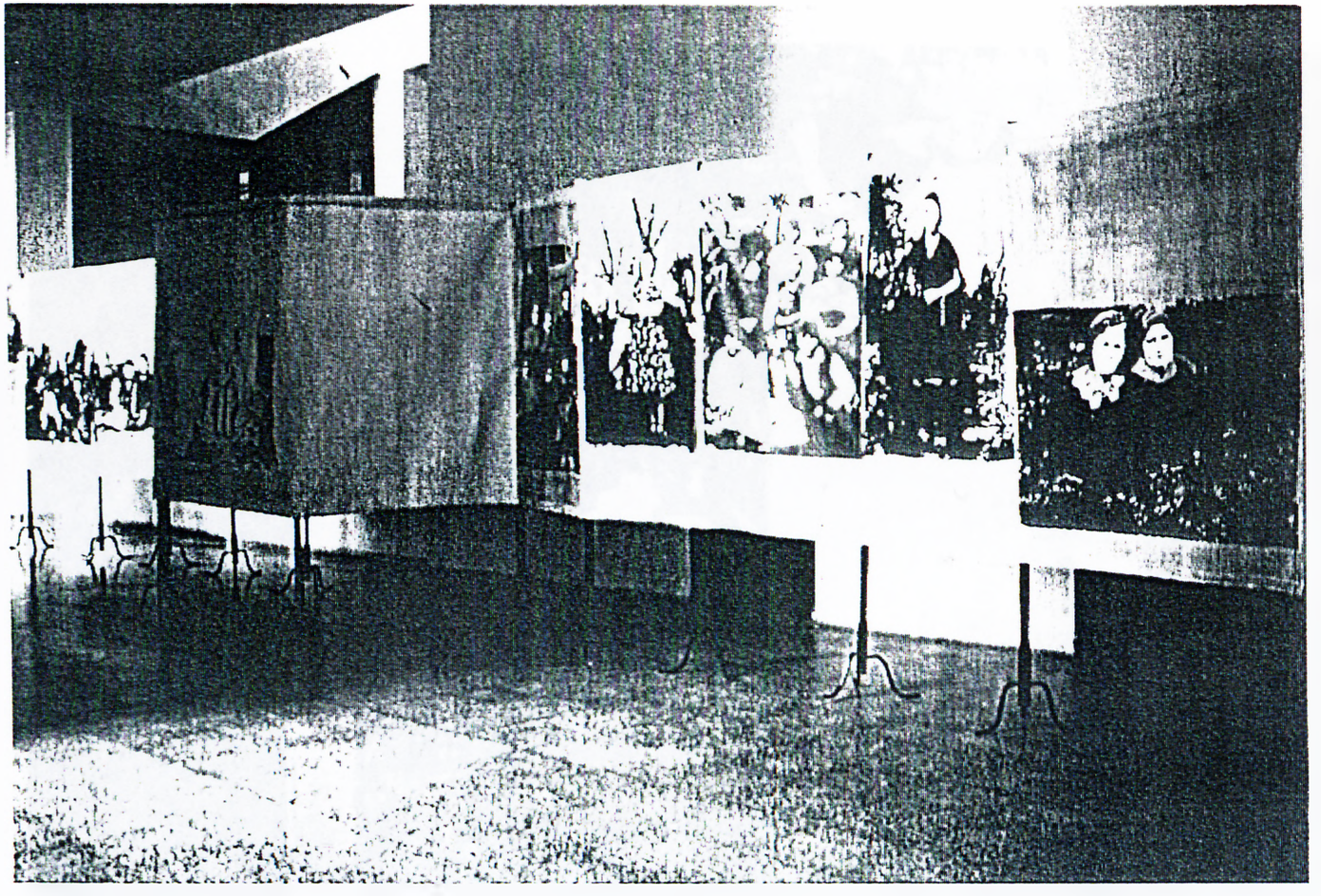

Plate 2

Plate 3

Plate 4

Plate 5

Plate 6

Plate 7

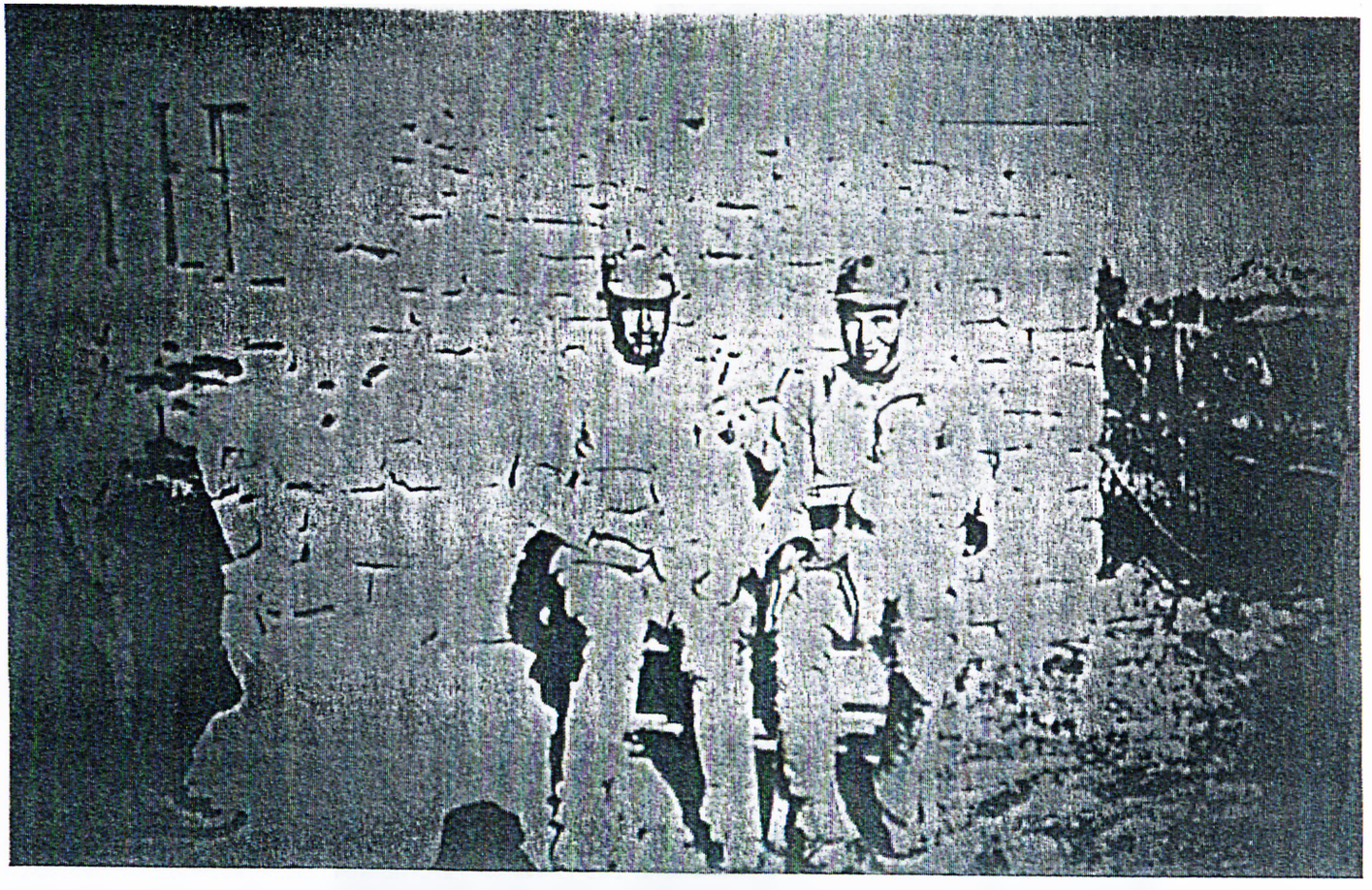

Plate 8

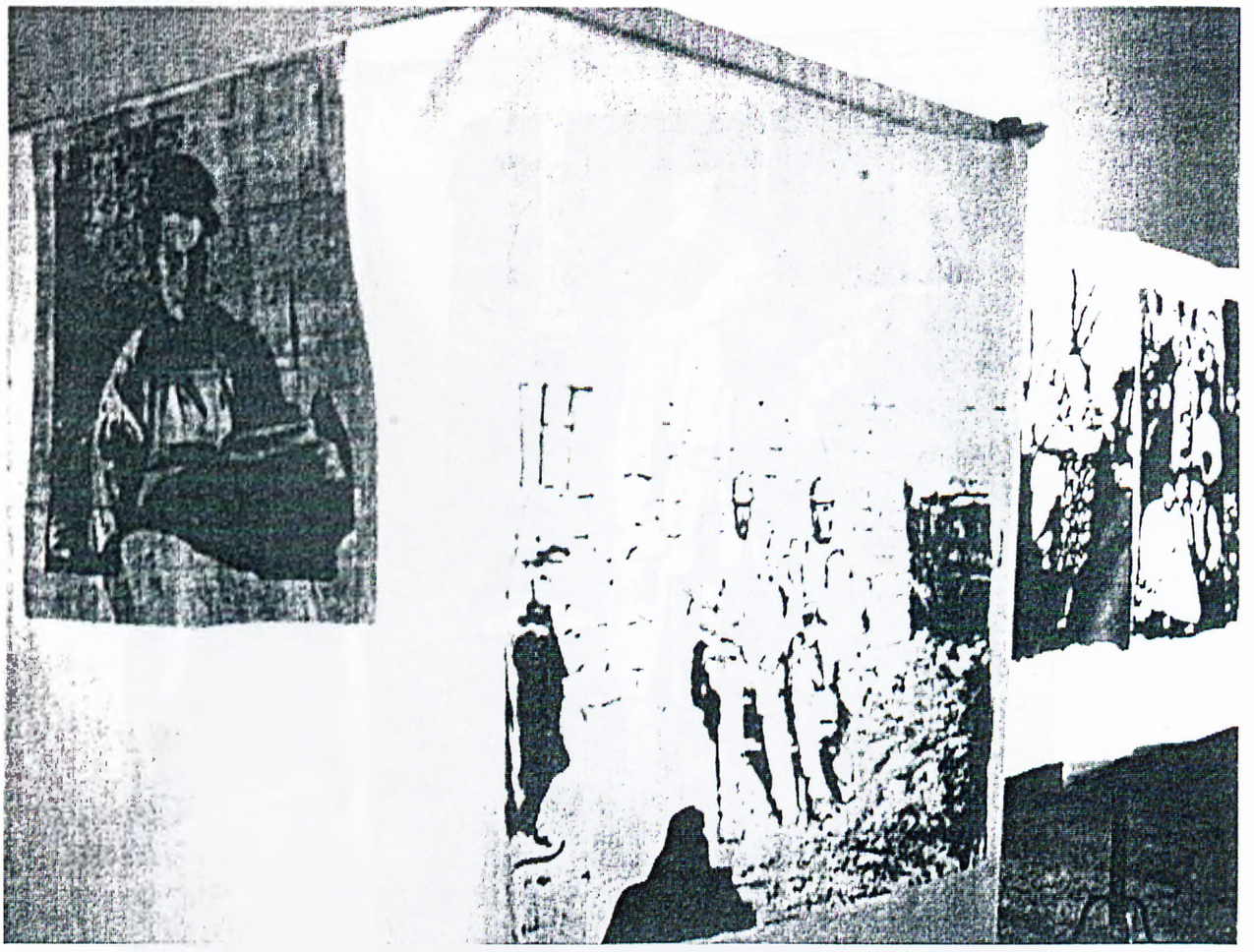

Plate 9

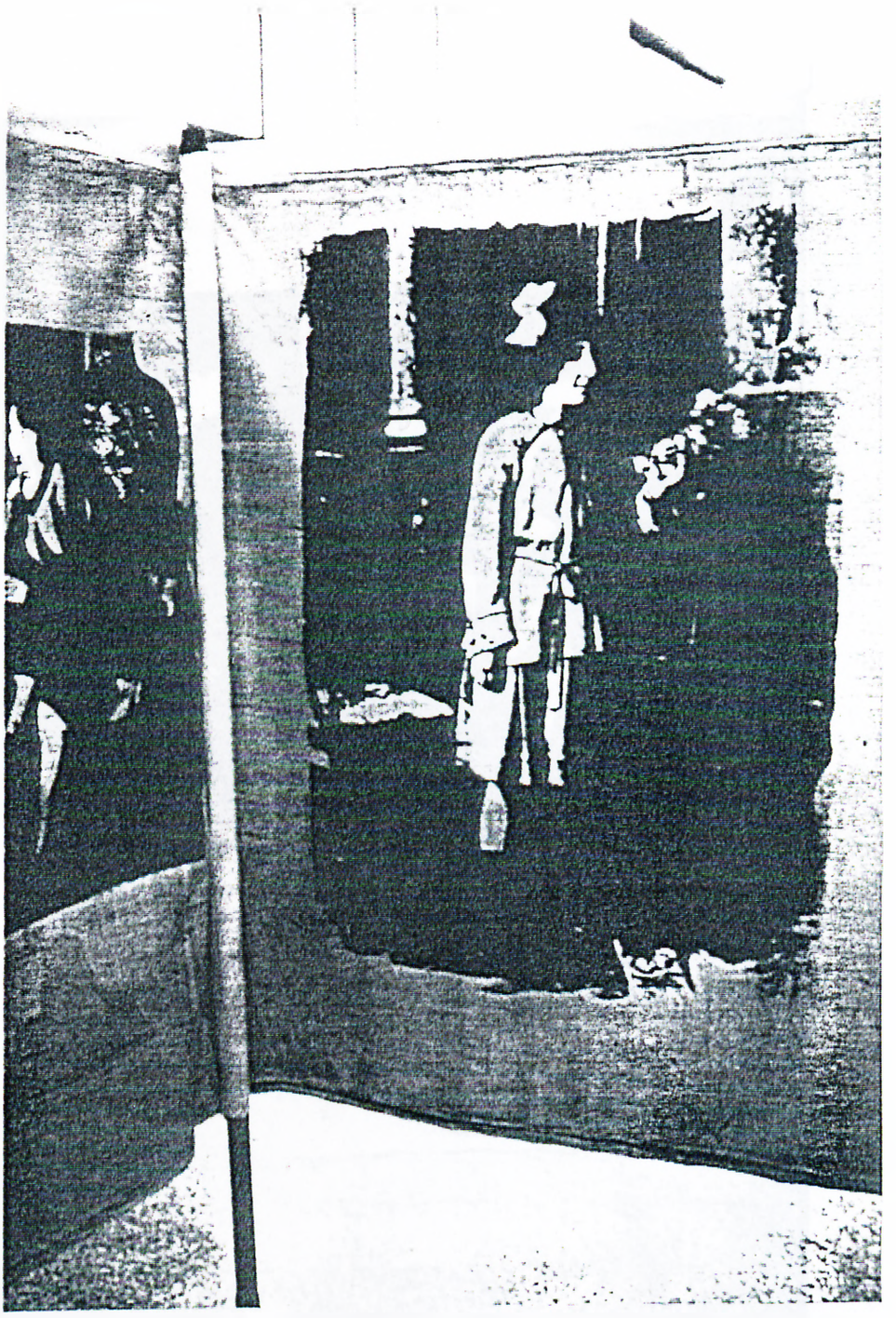

Plate 10

Plate 11

Plate 12

Plate 13

Plate 14

Plate 15

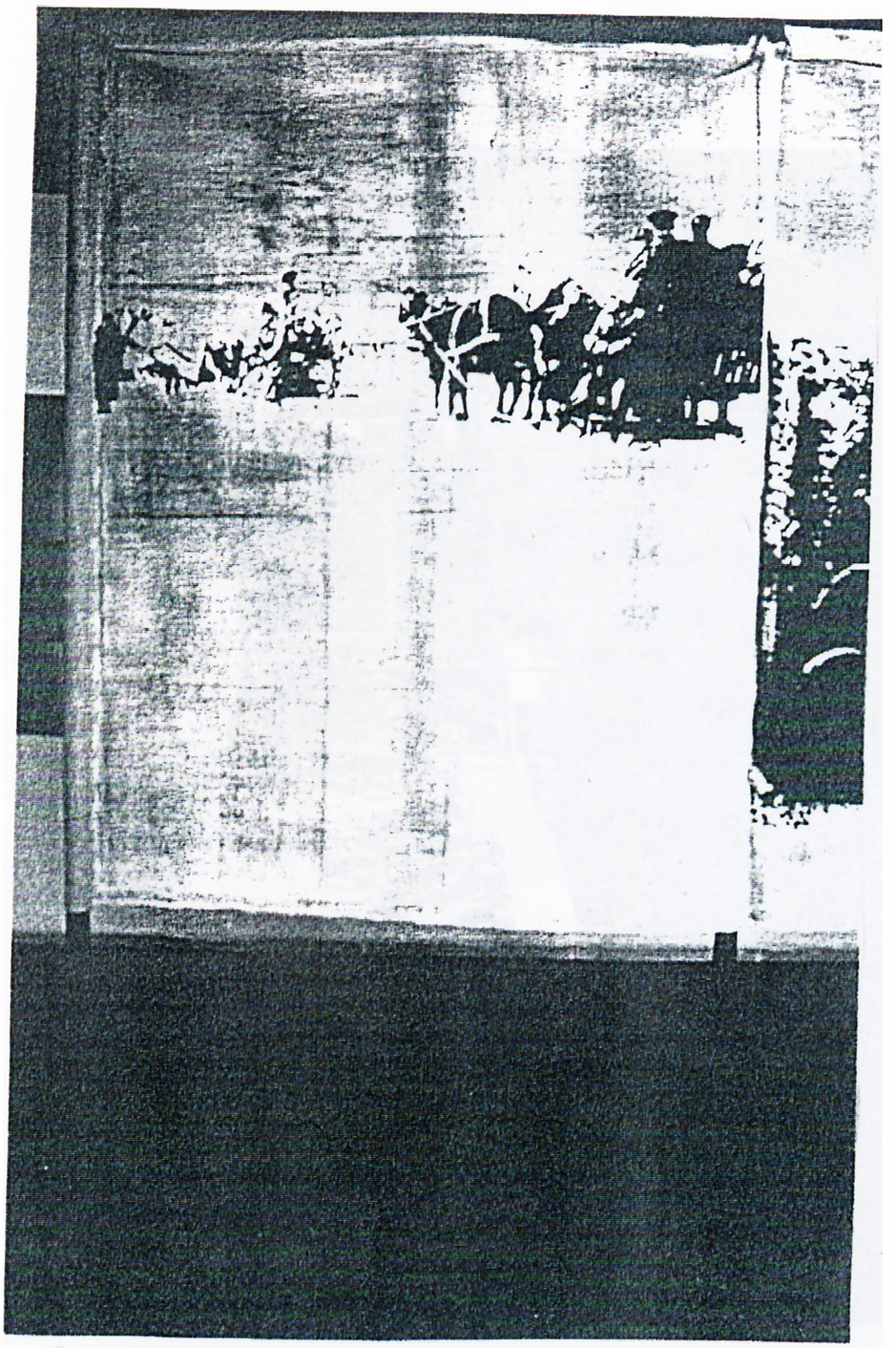

Plate 16

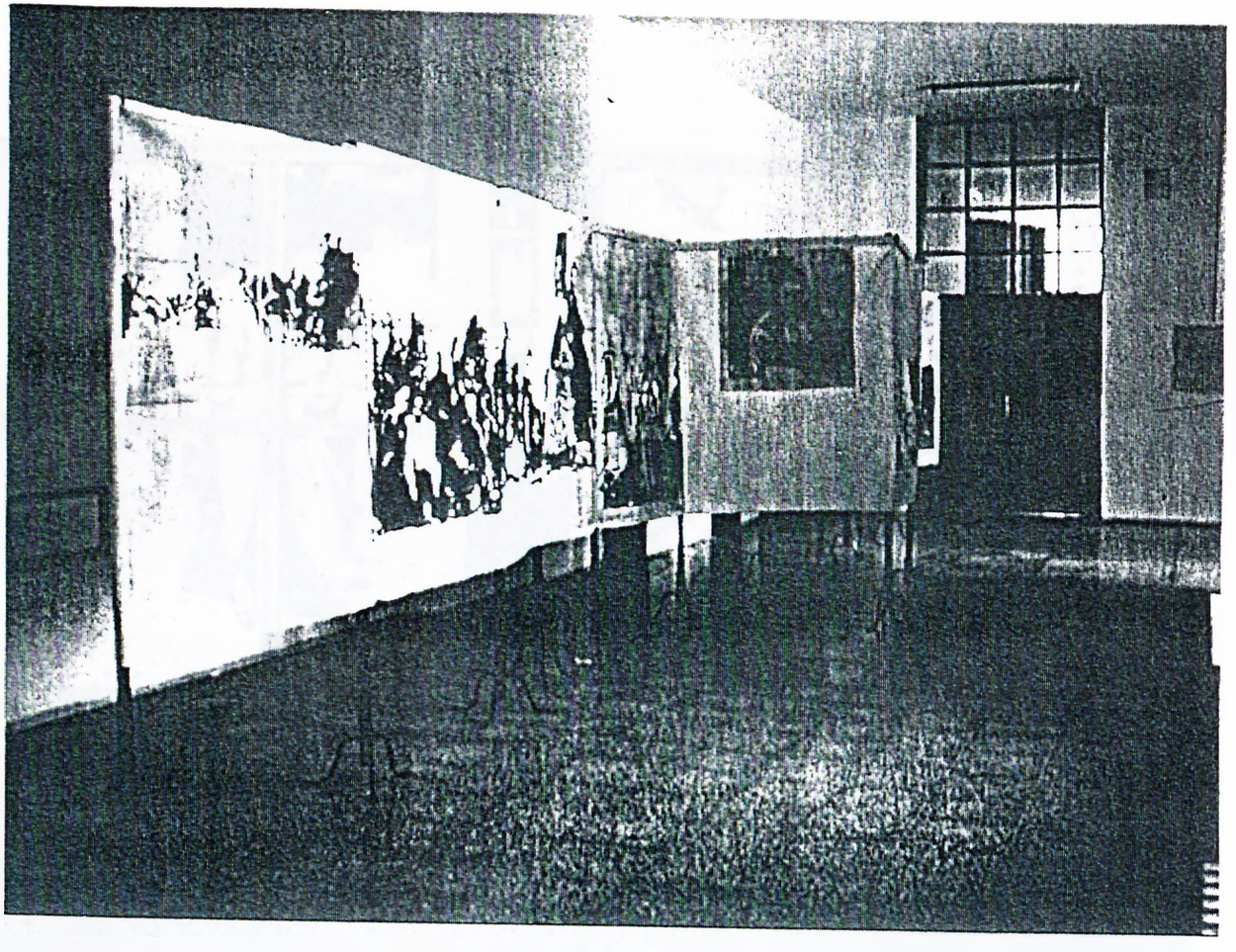

Plate 17

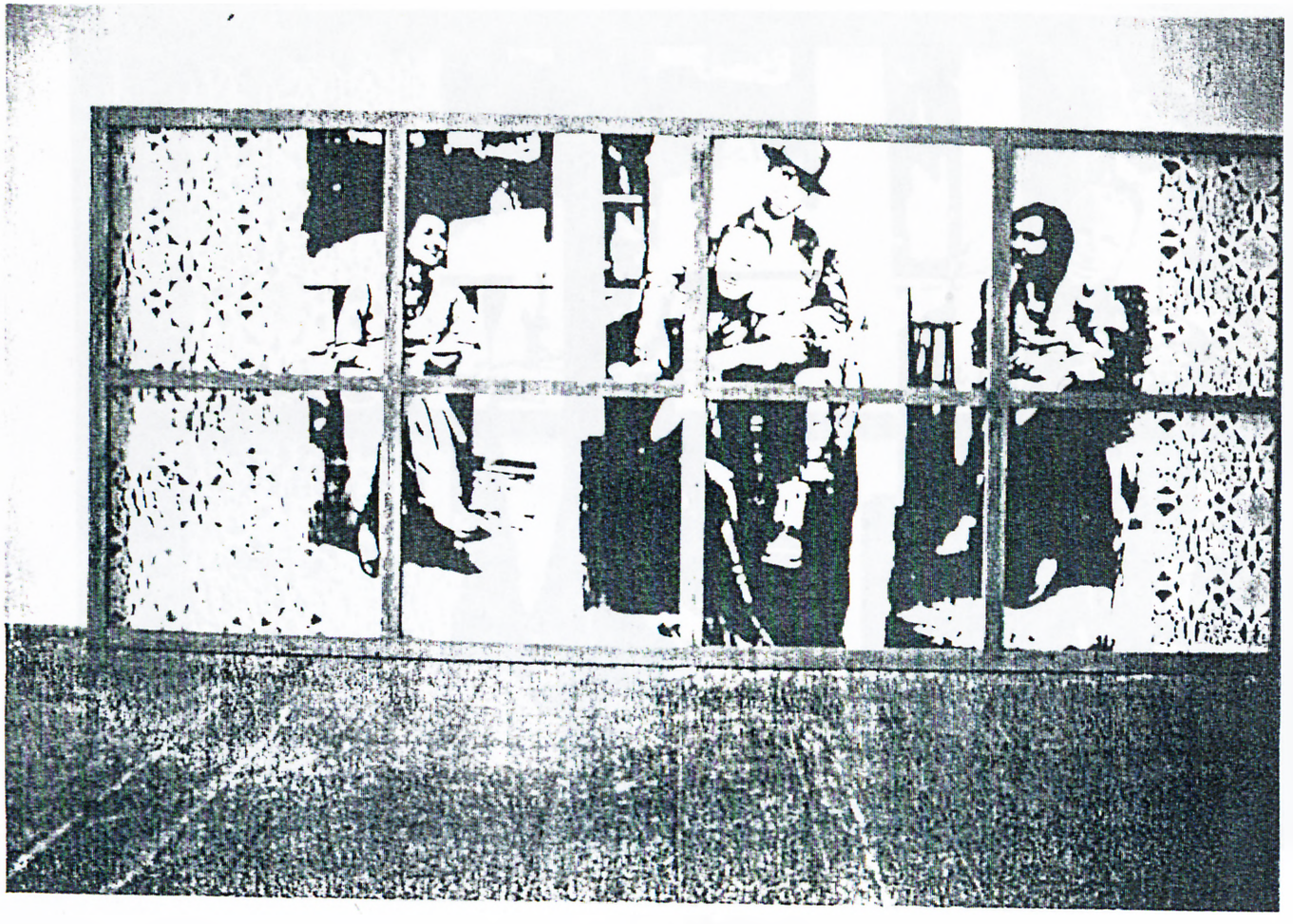

Plate 18

Plate 19

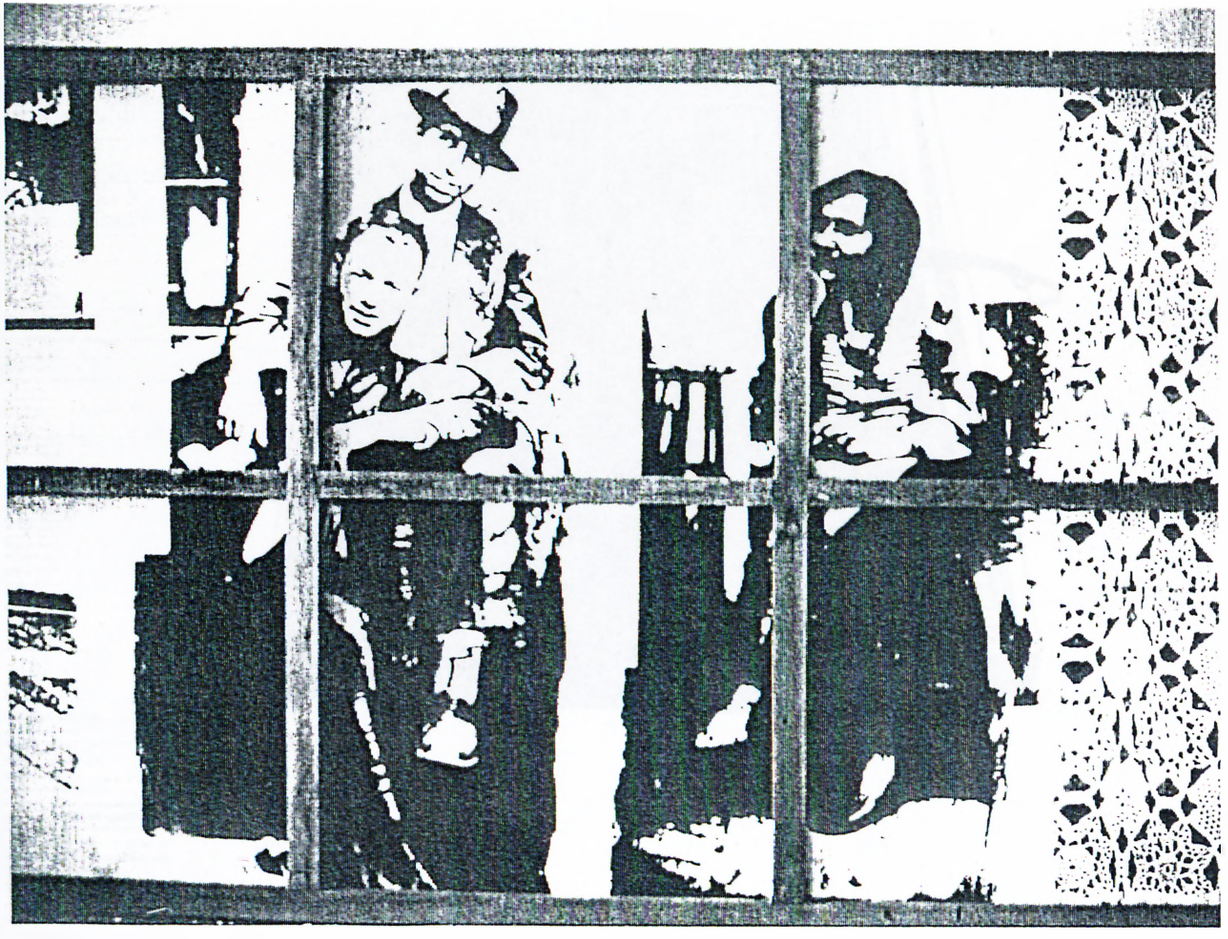

Plate 20

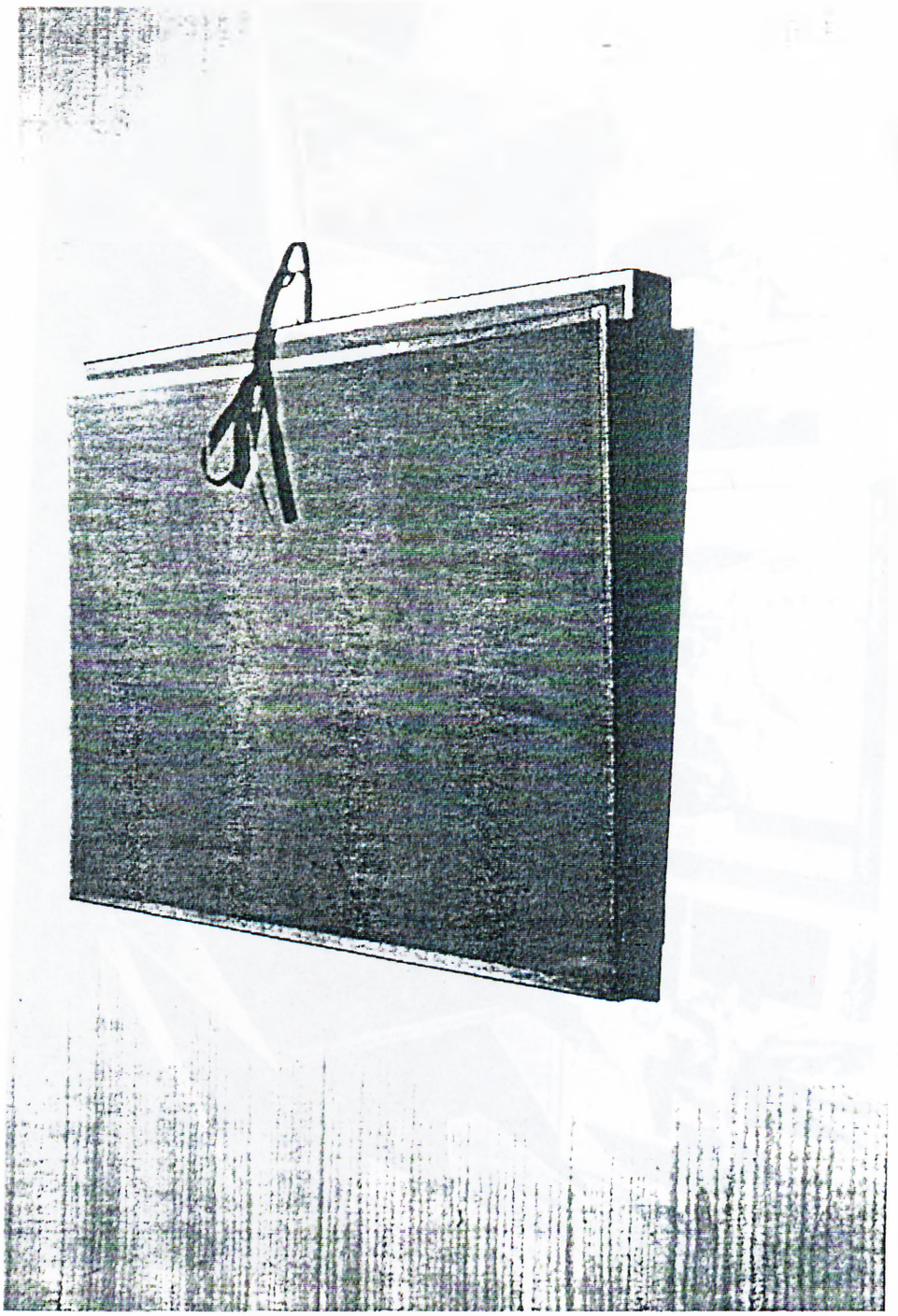

Plate 21

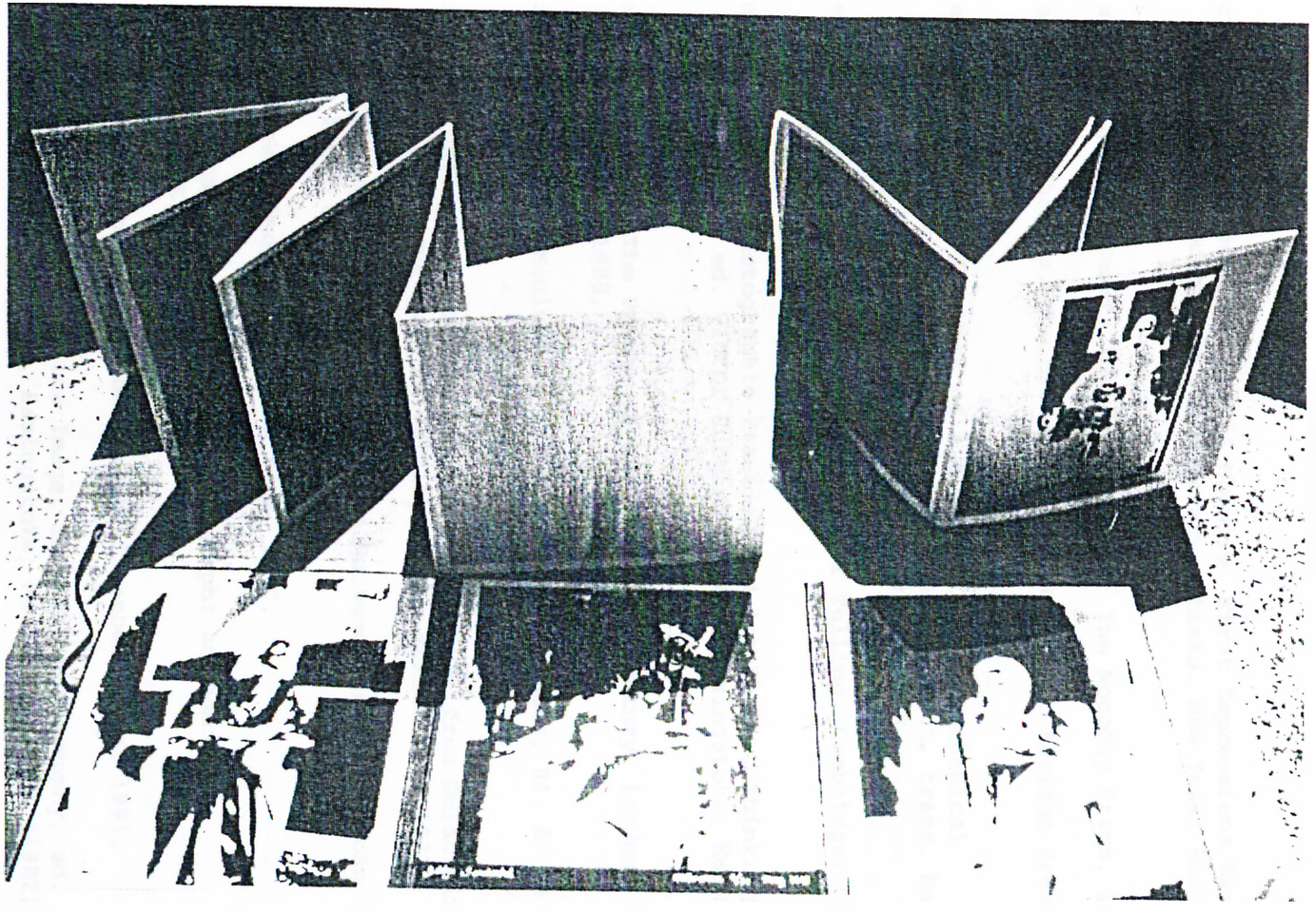

Plate 22

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